<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4337
Pro Pro Pro Ala Val Xaa Ser Leu Pro Pro Leu Leu Leu Pro Ser Leu
1 5 10 15

Leu Pro Pro Gln Gly Ser Gly Ala Ala Ser Pro Ser Pro Thr Pro Trp
20 25 30

<210> 4338
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4338
Met Ser Pro Asn Cys His Leu Leu Glu Thr Arg Pro Ser Ala Ser Leu
1 5 10 15

Leu Leu Leu Gly Ile Pro Leu Leu Arg Gly Ala Ser
20 25

<210> 4339
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4339
Met Leu Asn Val Phe Ala Val Pro Val Tyr Val Leu Leu Ile Ile Phe
1 5 10 15

Trp Glu Arg Arg Ala Lys Lys Tyr Thr Ala Glu Asn Arg Gln Phe Met
20 25 30

Leu

<210> 4340
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4340
Met Asn Leu Lys Ile Leu Thr Cys Phe Leu Val Ser Tyr Thr Phe Pro
1 5 10 15

Ser Ser Arg Ser Ala Glu Pro Ile Met Leu Lys Ile Ile Ile Ile Lys
20 25 30

Lys Ser Gly Trp Arg Ser
35

<210> 4341
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4341
Met Ser Glu Ala Gly Trp Trp Ala Trp Leu Phe Val Ile Leu His Pro
1 5 10 15

Phe Gly Met Pro Asp Thr Phe His Asn Asn Phe Lys Lys Asp Lys Thr
20 25 30

Thr Ala Glu Lys Cys Ile Glu
35

<210> 4342
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4342
Met Phe Leu Gln Val Ser Tyr Leu Trp Thr Asp Val Ser Ala Gly Gln
1 5 10 15

Leu Leu Met Trp Leu Cys Arg Trp Pro Thr Thr Val Ala Gly Tyr Phe
20 25 30

Ser Gln Gly Thr Cys Leu Leu Glu Met Tyr Pro Leu Ser Ser Pro Phe
35 40 45

Ser Ser Phe Cys Gln Arg Ile Ala Gly Val Val Glu Glu Ser
50 55 60

<210> 4343
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4343
Met Thr Ala Tyr Leu Leu Val Leu Gln Ala Leu Thr Arg Leu Thr Ala
1 5 10 15

Gln Thr His His Thr Gly Glu His Glu Arg Val Asn Glu Ser Phe Ile
20 25 30

Ile

<210> 4344
<211> 29

<212> PRT
<213> Homo sapiens

<400> 4344
Met Pro Arg Pro Gly Ser His Leu Ser Trp Trp Arg Leu Trp Leu Ala
1 5 10 15

Pro Arg Pro Pro Ala Leu Leu Leu Arg Asp Ser Arg Thr
20 25

<210> 4345
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4345
Met Val Ile Ile Ile Val Phe Asn Gln
1 5

<210> 4346
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4346
Met Cys Cys Tyr Glu Ala Leu Ala Ser Trp Val Met His Phe Leu Val
1 5 10 15

Phe Ala Leu Pro Arg Ser Leu Ser His Val Ser Phe Ser Leu Gly Phe
20 25 30

Tyr Pro Thr Leu Lys
35

<210> 4347
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4347
Met Leu Ile Phe Tyr Ile Leu Leu Cys Met Val Lys Gly
1 5 10

<210> 4348
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4348
Leu Phe Cys Pro Leu Leu Val Ile Phe Gln Asn Phe Cys Ser Gly Asp
1 5 10 15

Asn

<210> 4349
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4349
Met Gly Val Gly Leu Leu Asn Arg Ile Ile
1 5 10

<210> 4350
<211> 66
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4350
Met Gln Leu Ser Ser Ala Val Ile Ala Phe Ser Cys Cys Pro Val Phe
1 5 10 15

Met Trp Ser Leu Val Asn Ser Thr Arg Ile Leu Ser Leu Leu Ala Lys
20 25 30

Val Leu Pro Xaa Ala Glu Arg Glu Ser Pro Ser Lys Leu Thr Ser Val
35 40 45

Thr Pro Pro Ser Leu Thr Pro His Leu Xaa Arg Ala Thr Asn Xaa Leu
50 55 60

Phe Asp
65

<210> 4351
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4351
Met Ser Gly Ser Gln Val Val Ala Leu Phe Leu Leu Cys Val Arg Ile
1 5 10 15

Ser Lys Val Ile Ser Val Tyr Cys Leu Glu Ser Gly Leu Phe Cys Phe
20 25 30

Thr Pro Thr Phe Thr Glu Lys Asn Phe Phe Ser Gln Ala Thr Lys His
35 40 45

Leu Val Ser Gly Val Lys Glu Asp Phe Ile Ile Leu Glu Leu
50 55 60

<210> 4352
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4352
Met Leu Ala Val Phe Cys Phe Leu Ser Pro Asn Ser Leu Leu Phe Phe
1 5 10 15

Ile Phe Trp Ser Arg Val Tyr Arg Phe Pro Pro Asn Arg Arg Ser Arg
20 25 30

Pro Gly Ile Phe Leu Arg Gly
35

<210> 4353
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4353
Met Leu Ile Ile Met Ala Gln Leu Leu Gln Trp Phe Ser Cys Trp Ser
1 5 10 15

Phe Leu Pro Leu Ala Ala Leu Asn Cys Glu Trp Tyr Arg Val Thr Glu
20 25 30

Leu Thr

<210> 4354
<211> 63
<212> PRT
<213> Homo sapiens

<400> 4354
Met Arg Leu Pro Leu Arg His Ser Ala Ser Leu Glu Ala Ser Val Ser
1 5 10 15

Arg Val Leu His Thr Pro Ser Gly Arg Asp Gly Pro Gly Thr Pro Cys
20 25 30

Asn Pro Ser Gly Gln Met Cys His Cys Pro Met Lys Ile Lys Gly His
35 40 45

His Ser Ser Ser Arg Arg Gln Asn Leu Asn Ser Asn Leu Ser Gln
50 55 60

<210> 4355
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4355
Met Leu Ser Cys Leu Arg His Trp Thr Trp Asn Leu Leu Val Leu Arg
1 5 10 15

Pro Leu Ala Ser Met Val Thr Pro Ala Pro His Leu Val Arg Arg Pro
20 25 30

Ser Val Ser Asp
35

<210> 4356
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4356
Met Arg Glu Asn Phe Thr Ala Lys Val Trp Leu Ala Ile Pro Phe Leu
1 5 10 15

Ala Leu Gly Phe Leu Cys Val Ser Glu Pro Arg Tyr Thr Asp Phe Arg
20 25 30

Ser Lys Glu Ser Ser Ser Leu Pro Leu Gly Lys Thr Gly Arg Gly Met
35 40 45

Val Leu Tyr Gln Ser His Thr
50 55

<210> 4357
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4357
Met Arg Val Trp Arg Leu Ala Trp Phe Ala Trp Ala Trp Val Gly His
1 5 10 15

Gly Thr Ser Cys Thr Gly Val Gln Ser Thr Leu His Ile Val Thr Pro
20 25 30

Ser

<210> 4358
<211> 46

<212> PRT
<213> Homo sapiens

<400> 4358
Met Lys Ile Ser Phe Thr Phe Phe Ile Leu Leu Leu Lys Asn Val Leu
1 5 10 15

Ala Ala Arg Lys Phe Lys Met Ile Asp Val Ala His Ile Met Phe Leu
20 25 30

Cys Asp Arg Leu Leu Trp Ile Lys Ser Arg Gln Thr Met Ala
35 40 45

<210> 4359
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4359
Met Arg Leu Arg Asp Arg Arg Ala Gly Glu Gly Gln Arg Gln Leu Leu
1 5 10 15

Leu Leu Arg Leu Leu Leu Arg Thr Ser Phe Trp Gly Val Val Phe
20 25 30

<210> 4360
<211> 66
<212> PRT
<213> Homo sapiens

<400> 4360
Met Leu Gly Val Ser Ala Ser Gly Ser Leu Gln Leu Leu Gln Ser Gln
1 5 10 15

Arg Gly Leu Glu Arg Gly Pro Ala Pro Arg Gln Pro Ala Asp Thr Ser
20 25 30

Ser Ser Met Cys Glu Ser Leu Val Phe Thr Pro Thr Ala Pro Phe Ser
35 40 45

Gly Gly His Cys Pro Lys Ala Arg His Gly Arg Leu Thr Ser Pro Phe
50 55 60

Tyr Gly
65

<210> 4361
<211> 47
<212> PRT
<213> Homo sapiens

<400> 4361
Met Cys Gly Arg Gln Pro Met Arg Leu Trp Val Ser Phe Ala Val His
1 5 10 15

Cys Thr Arg Pro Val Lys Ala Ala Pro Arg Asn Pro Thr Leu Leu Leu
20 25 30

Cys Arg Leu Pro Trp Pro Glu Ser Cys His Pro Thr Cys Arg Gln
35 40 45

<210> 4362
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4362
Met Thr Trp Pro Phe Phe Tyr Ser Thr Phe Arg Val Trp Ala Leu Ala
1 5 10 15

Pro Ser Val Ser Ala Leu Leu Thr Gln Cys Val Lys Met Lys Thr Glu
20 25 30

Pro Ser Phe Pro Ser Ser Ser Val Pro Gln Thr Phe Ser Pro Thr Gln
35 40 45

Leu

<210> 4363
<211> 358
<212> PRT
<213> Homo sapiens

<400> 4363
Met Gly Ser Ala Tyr Ala Ile Ile Thr Ala Leu Leu Thr Lys Phe Thr
1 5 10 15

Lys Leu Cys Glu Phe Pro Met Leu Glu Thr Gly Leu Phe Phe Leu Leu
20 25 30

Ser Trp Ser Ala Phe Leu Ser Ala Glu Ala Ala Gly Leu Thr Gly Ile
35 40 45

Val Ala Val Leu Phe Cys Gly Val Thr Gln Ala His Tyr Thr Tyr Asn
50 55 60

Asn Leu Ser Ser Asp Ser Lys Ile Arg Thr Lys Gln Leu Phe Glu Phe
65 70 75 80

Met Asn Phe Leu Ala Glu Asn Val Ile Phe Cys Tyr Met Gly Leu Ala
85 90 95

Leu Phe Thr Phe Gln Asn His Ile Phe Asn Ala Leu Phe Ile Leu Gly
100 105 110

Ala Phe Leu Ala Ile Phe Val Ala Arg Ala Cys Asn Ile Tyr Pro Leu
115 120 125

Ser Phe Leu Leu Asn Leu Gly Arg Lys Gln Lys Ile Pro Trp Asn Phe
130 135 140

```
Gln His Met Met Met Phe Ser Gly Leu Arg Gly Ala Ile Ala Phe Ala
145                 150                 155                 160

Leu Ala Ile Arg Asn Thr Glu Ser Gln Pro Lys Gln Met Met Phe Thr
                165                 170                 175

Thr Thr Leu Leu Leu Val Phe Phe Thr Val Trp Val Phe Gly Gly Gly
            180                 185                 190

Thr Thr Pro Met Leu Thr Trp Leu Gln Ile Arg Val Gly Val Asp Leu
        195                 200                 205

Asp Glu Asn Leu Lys Glu Asp Pro Ser Ser Gln His Gln Glu Ala Asn
    210                 215                 220

Asn Leu Asp Lys Asn Met Thr Lys Ala Glu Ser Ala Arg Leu Phe Arg
225                 230                 235                 240

Met Trp Tyr Ser Phe Asp His Lys Tyr Leu Lys Pro Ile Leu Thr His
                245                 250                 255

Ser Gly Pro Pro Leu Thr Thr Thr Leu Pro Glu Trp Cys Gly Pro Ile
            260                 265                 270

Ser Arg Leu Leu Thr Ser Pro Gln Ala Tyr Gly Glu Gln Leu Lys Glu
        275                 280                 285

Asp Asp Val Glu Cys Ile Val Asn Gln Asp Glu Leu Ala Ile Asn Tyr
    290                 295                 300

Gln Glu Gln Ala Ser Ser Pro Cys Ser Pro Pro Ala Arg Leu Gly Leu
305                 310                 315                 320

Asp Gln Lys Ala Ser Pro Gln Thr Pro Gly Lys Glu Asn Ile Tyr Glu
                325                 330                 335

Gly Asp Leu Gly Leu Gly Gly Tyr Glu Leu Lys Leu Glu Gln Thr Leu
            340                 345                 350

Gly Gln Ser Gln Leu Asn
        355
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<210> 4364
<211> 37
<212> PRT
<213> Homo sapiens

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<400> 4364
Met Gly Leu Pro Val Ser Trp Ala Pro Pro Ala Leu Trp Val Leu Gly
  1               5                  10                  15

Cys Cys Ala Leu Leu Leu Ser Leu Trp Ala Leu Cys Thr Ala Cys Arg
             20                  25                  30

Arg Pro Arg Thr Leu
         35
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<210> 4365
<211> 97
<212> PRT
<213> Homo sapiens

<400> 4365
Met Ser Ile Ser Arg Leu Lys Ile Ala Lys Arg Phe Leu Gln Asp Ile
1 5 10 15

Pro Gln Asp Gln Phe Leu Tyr Ile His Leu Val Leu Gly Gly Thr Ser
20 25 30

Met Gly Phe His Val Leu Trp Leu Leu Val Glu Phe Thr Gln Trp Arg
35 40 45

Thr Leu Ala Arg Gly Arg Lys Arg Gly Gly Ser Ser Leu Thr Gly Leu
50 55 60

Asn Phe Thr Phe Cys Ser Pro Trp Met Arg Ala Val Ile Ile Thr Ile
65 70 75 80

Pro Gly Asn Ser Gln Arg Lys Arg Lys Gly Lys Arg Phe Gly Gln Asp
85 90 95

Ser

<210> 4366
<211> 91
<212> PRT
<213> Homo sapiens

<400> 4366
Met Gly Thr Trp Ile Glu Met Ser Ser Leu Trp Pro Cys Thr Trp Cys
1 5 10 15

Thr Glu Pro Trp Arg Arg Ser Pro Cys Pro Pro Pro Cys Pro Arg Pro
20 25 30

Ser Ser His Pro Pro Arg Glu Arg Arg Leu Cys Ser Leu Ala Pro Ser
35 40 45

Pro Ser Cys Leu Pro Ala Pro His Gln Lys Thr Ala Ser Ala Pro Arg
50 55 60

Arg Pro Thr Ala Ala Ser Ala Ala Ser Thr Ala Gln Gly Ala Cys Pro
65 70 75 80

Pro Ser Thr Ala Ser Ser Lys His Ser Gln Gln
85 90

<210> 4367
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4367

Met Arg Val Val Leu Pro Ser Trp Leu Gly Ser Ser Gly Cys Trp Asp
1 5 10 15

Ile Leu Ser Leu Leu Cys Phe Asn Ile Phe Thr Ala Leu Phe Leu Asn
20 25 30

Gly Pro Val Thr Arg Asp
35

<210> 4368
<211> 58
<212> PRT
<213> Homo sapiens

<400> 4368
Met Arg Leu Pro Ile Arg Thr Gln Asn Tyr Leu Gln Thr Cys Leu Gly
1 5 10 15

Leu Gly Leu Ala Ser Phe Leu Ser Ser Ser Gly Gly Val Trp Gln His
20 25 30

Ser Phe Phe Ile Leu Ile Leu Pro Gly Cys Gly Gln His Trp Ser Ser
35 40 45

Val Ser Pro Asp Gly Pro Pro Leu Cys Pro
50 55

<210> 4369
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4369
Met Gly Asp Pro Pro Arg Ala Ser Leu Asp Asn Ala Leu Leu Ala Pro
1 5 10 15

<210> 4370
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4370
Met Cys Val Ser Phe Leu Lys Arg Ile Lys Ala Leu Ile Trp Phe Phe
1 5 10 15

Ser Phe Lys Lys Leu Leu Lys Ala Ala Gln Ile Gly Asn Thr Lys Lys
20 25 30

Tyr Gly His Glu Ser
35

<210> 4371
<211> 80
<212> PRT
<213> Homo sapiens

<400> 4371
Met Asn Tyr Tyr Phe Phe Phe Lys Val Thr Thr Leu Asp Phe Ala Ile
1 5 10 15

Phe Gln Val Leu Leu Val Ile Cys Gln Lys Ala Ile Met Leu Ile Thr
20 25 30

Gln Ser Thr Leu Pro Pro Asp Gly Ile Gly Pro Gln Asn Ser Tyr Leu
35 40 45

Gly Glu Leu Pro Ser Gln Asn Arg Met Thr Phe Pro His Leu Leu Ile
50 55 60

Leu Leu Ser Phe Ala Leu Ser Ser Ser Met Glu Asn Lys Asn Phe Ser
65 70 75 80

<210> 4372
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4372
Met Arg Ser Gln Asp Leu Thr Gly Phe Ala Val Cys Trp Gly Gln Xaa
1 5 10 15

Ile Ile Leu Leu Ile Leu Asp Ser Gln Pro
20 25

<210> 4373
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4373
Met Ser Gly Val Pro Leu Arg Thr Gly Gly Trp Pro Ala Gly Leu Arg
1 5 10 15

Gly Val Ser Phe His Ala Gly Leu Pro Ala Ala Gly Gln
20 25

<210> 4374

<211> 71
<212> PRT
<213> Homo sapiens

<400> 4374
Met Thr Glu Glu Arg Gly Val Trp Ala Val Leu Leu Leu Arg Ser Leu
1 5 10 15

Ala Pro Ser Leu Ser Cys Leu Thr Val Cys Cys Ser Ser Trp Leu Leu
20 25 30

Trp Cys Pro Leu Asn Ser Cys Val Thr Cys Pro Gly Leu Ser Leu Ser
35 40 45

Leu Leu Arg Gln Gly Ala Ala Gly Cys Phe Leu Thr Cys Thr Gly Met
50 55 60

Pro Gln Ser Thr Trp Pro Gly
65 70

<210> 4375
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4375
Met Phe Tyr Leu Met Trp Trp Gln Phe Ile Gln Gly Val Met Phe Ser
1 5 10 15

Gln His Leu Asp Thr Gln Gly Asn Phe Leu Phe Trp Gly Asp Ser Ala
20 25 30

Pro Ser Gly Trp Arg
35

<210> 4376
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4376
Glu Gln Val Glu Glu Ser Leu Gln Asp Glu Asp Asp Asn Asp Val Tyr
1 5 10 15

Ile Leu Thr Lys Val Ser Asp Ile Leu His Ser Ile Phe Ser Ser Tyr
20 25 30

Lys Glu Lys Val Leu Pro Trp Phe Glu Gln Leu Leu Pro Leu Ile Val
35 40 45

Asn Leu Ile Cys Pro His Arg Pro Trp Ala Arg Gln Thr Met Gly Val
50 55 60

Met His Leu
65

<210> 4377
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4377
Met His Pro His Phe Phe Cys Leu Lys Ile Phe Thr Lys Val Ile Leu
1 5 10 15

Leu Gln Val Phe Tyr Thr Gly Phe Ile Cys Gly Gln Cys Arg
20 25 30

<210> 4378
<211> 124
<212> PRT
<213> Homo sapiens

<400> 4378
Met His Pro Ala Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu
1 5 10 15

Trp Gly Ala Ala Pro Thr Arg Gly Leu Ile Arg Ala Thr Ser Asp His
20 25 30

Asn Ala Ser Met Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Ala Thr
35 40 45

Leu Ser Gln Glu Gly Leu Gln Gly Phe Leu Val Glu Ala His Pro Asp
50 55 60

Asn Ala Cys Ser Pro Ile Ala Pro Pro Pro Pro Ala Pro Val Asn Gly
65 70 75 80

Ser Val Phe Ile Ala Leu Leu Arg Arg Phe Asp Cys Asn Phe Asp Leu
85 90 95

Lys Val Leu Asn Ala Gln Lys Ala Gly Tyr Gly Ala Ala Val Val His
100 105 110

Asn Val Asn Ser Asn Glu Leu Leu Asn Met Val Leu
115 120

<210> 4379
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4379
Phe Thr Thr Gly Asp Phe
1 5

<210> 4380
<211> 33
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4380
Ser Leu Gly Gly Trp Gly Gly Gly Gln Glu Gly Lys Xaa Gly Gly Xaa
1 5 10 15

Lys Leu Gly Asp Ser Leu Arg Asp Phe Cys Phe Lys Pro Xaa Val Phe
20 25 30

Leu

<210> 4381
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4381
Met Pro Trp Trp Ser Arg Trp Val Leu Trp Glu Ser Cys Ala Ser
1 5 10 15

<210> 4382
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4382
Met Cys Ser Leu Val Val Ala Leu Tyr Leu Ile Pro Pro Phe His Thr
1 5 10 15

Asp Gln Leu Leu Pro Gly Ser Ser Pro Leu Leu Ser Val Val Lys Ser
20 25 30

Val Thr Asn Phe Trp Arg Ser Phe Asn Leu
35 40

<210> 4383
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4383
Met Asn Ile Glu Cys Phe Leu Ile Leu Phe Leu Phe Ser His Gln Ile
1 5 10 15

Val Ile Cys His Ser Ser Pro Leu Leu Phe Val Leu His Phe Leu Leu
20 25 30

Ile Val

<210> 4384
<211> 92
<212> PRT
<213> Homo sapiens

<400> 4384
Met Phe Phe Ser Phe Leu Val Cys Thr Leu Arg Ser Cys Ile Thr Cys
1 5 10 15

Thr Asp Ser Cys Asn His Cys Asn His Ile Lys Leu Met Asn Thr Lys
20 25 30

Ser Leu Met Leu Pro Phe Tyr Ala Tyr Thr Pro Ser Lys Pro Asn Ser
35 40 45

Ala Asn His Phe Ser Pro Ile Ser Ile Ile Ser Ser Phe His Glu Tyr
50 55 60

Asp Lys Asn Lys Ile Val Phe Val Asn Gly Phe Tyr Lys Phe Tyr Ile
65 70 75 80

Asn Lys Leu Tyr Glu Phe Leu Leu Ile Glu Ser Met
85 90

<210> 4385
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4385
Met Ser Ile
1

<210> 4386
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4386
Met Lys Gln Lys Lys Ile Ile Leu Leu Phe Asn Met Ala
1 5 10

<210> 4387
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4387
Cys Val Leu Ser Gln Phe Phe His Phe Pro Ala Cys Phe Leu Met Ser
1 5 10 15

Ala Phe Gly Pro Ile Ile Val Ser Gln His His Gln His Val Asp Lys
20 25 30

Lys

<210> 4388
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4388
Met Glu Ala Ile Phe Thr Phe Thr Val Leu Asn Gly Lys Ile
1 5 10

<210> 4389
<211> 5
<212> PRT
<213> Homo sapiens

<400> 4389
Met Trp Leu Ala Cys
1 5

<210> 4390
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4390
Met His Val Leu Pro Pro His Phe Cys Ser Ala
1 5 10

<210> 4391
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4391
Asp Arg Tyr Phe Val Leu Ile Gln Met Gln
1 5 10

<210> 4392
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4392
Met Cys His Pro Leu Thr Gly Glu Ser Gly Gly Val Val Gly Val Asn
1 5 10 15

Val Leu Lys Ile Tyr Val Ser Cys Ile Leu Phe Glu Ser Ala Val Phe
20 25 30

Ser Gln Gln Leu
35

<210> 4393
<211> 47
<212> PRT
<213> Homo sapiens

<400> 4393
Met Phe Trp Met Ser Leu Trp Val Ser Phe Ile Ile Met Leu His Asn
1 5 10 15

Leu Tyr Thr Gly Tyr His Phe Arg Val Leu Lys Gly Asp Thr Ser Tyr
20 25 30

Lys Glu Lys Asp Ala Cys Phe His Phe Leu Lys Lys Lys Lys Lys
35 40 45

<210> 4394
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4394
Met Cys Phe Cys Leu Lys Ser Ile Asn Ile Trp Phe His Leu His Ser
1 5 10 15

Asn Thr Trp Ile Gly Phe Ile Leu Phe Leu Leu Ala Phe Trp Ile Gln
20 25 30

Asn

<210> 4395
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4395
Met Asp Ser Ser Ala Ala Val Leu Gly Val Leu Leu Lys Thr Leu Leu
1 5 10 15

Leu Leu Trp Ser Cys Leu Leu Phe Pro Ser Gln Leu Val Lys Pro Pro

20 25 30

Ser Gly Ala Thr Val Phe Cys Asn Leu Gln Trp Ala Trp Arg Glu Arg
35 40 45

Ala Ser Pro Ala Leu His Ala Cys Ser
50 55

<210> 4396
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4396
Met Ser Tyr Ile Leu Asp Thr Phe Ser Leu Leu Leu Phe Leu Leu Tyr
1 5 10 15

Phe

<210> 4397
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4397
Glu Gly Leu Gly Ala Ser Trp Leu Trp His Leu Thr Ser Trp Ala Ser
1 5 10 15

Thr Ser Cys Ser Gln Asp Pro Cys Gly Asp Glu Arg Gly Ala Trp Lys
20 25 30

Gly Leu Arg Pro Ser Thr Ala
35

<210> 4398
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4398
Met Ala Gln Val Leu Ser Trp Cys Ala Lys Glu Thr Trp Leu Leu Leu
1 5 10 15

Gly Ile Ala Leu Arg Ser Ser Leu Ser Cys Pro Gln Pro Asn Trp Trp
20 25 30

Ala Pro Cys
35

<210> 4399
<211> 28
<212> PRT

<213> Homo sapiens

<400> 4399
Gly Asn Pro Lys Lys Leu Trp Arg Arg Met Val Leu Leu Leu Thr Arg
1 5 10 15

Gln Thr Tyr Leu Pro Leu Ala Leu Leu Cys Gly Lys
20 25

<210> 4400
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4400
Met Val Thr Val Val Gln Thr Leu Leu Leu Leu Thr Gln Asn Arg Ser
1 5 10 15

Gly Ala Met

<210> 4401
<211> 72
<212> PRT
<213> Homo sapiens

<400> 4401
Met Pro Leu Gly Arg Leu Leu Pro Arg Leu Leu Phe Phe Leu Ile Val
1 5 10 15

Thr Tyr Arg Leu Gly Val Leu Gly Thr Glu Ser Ser Gln Leu Leu Gln
20 25 30

Tyr Glu Glu Thr Val His Leu Phe Cys His Leu Asp Leu Phe Ala Thr
35 40 45

His Leu Leu Tyr Phe Leu Tyr Trp Lys Ile Phe Leu Leu Val Leu Ser
50 55 60

Tyr Glu Phe Leu Phe Cys Phe Asn
65 70

<210> 4402
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4402
Leu Trp Trp Leu Tyr Ile Val Ser Val Ala Ile Ile Gln Leu Cys Cys
1 5 10 15

Ser Ser Ala Asn Ala Asp Ile Asp Asn Met
20 25

<210> 4403
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4403
Val Met Glu Val Leu Met Thr Met Val Ala Ile Ile Ile Thr Ala Met
1 5 10 15

Gly Met Met Ala Leu Met Thr Glu
20

<210> 4404
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4404
Met Ser Cys Arg Cys Ser Gly Phe Leu Arg Arg His Leu His Ser Phe
1 5 10 15

Leu Ala Phe Phe Ala Gly Glu Gly Phe Gly Pro Leu Ser Leu Arg Glu
20 25 30

His Arg Gln Arg Lys Pro Gly Arg Ser Arg Leu Gln
35 40

<210> 4405
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4405
Met Glu Ser Gly His Cys Arg Leu Gly Lys Trp Ser Ser Leu Trp Trp
1 5 10 15

Cys Cys Ser Cys Gly Leu Leu
20

<210> 4406
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4406
Met Lys Pro Met Pro Leu Ser Glu Gly Lys Ser Ile Leu Leu Phe Gly
1 5 10 15

Gly Ala Ala Ala Val Ala Ile Leu Ala Val Ala Ile Gly Val Ala Leu
20 25 30

Ala Leu Arg Lys Lys
35

<210> 4407
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4407
Met Ser Xaa Ser Xaa Gly Thr Ser Val Xaa Phe Leu Arg Thr Arg Phe
1 5 10 15

Ser Leu Cys Ile Cys Gly Arg Asn Thr Pro Glu Val Met Leu Cys Tyr
20 25 30

Ser

<210> 4408
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4408
Met Phe Trp Cys Glu Phe Thr Ala Ser Phe Leu Leu Phe Leu Asn Ala
1 5 10 15

Ile Ser Gly Leu His Ile Asn Ser Ile Thr His Pro Trp Glu
20 25 30

<210> 4409
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4409
Met Ser Ser Leu Leu Leu Ile Ile Ile Leu Ala Leu Ser Leu Ala Tyr
1 5 10 15

Glu

<210> 4410
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4410
Leu Pro Gly Pro Cys Leu
1 5

<210> 4411
<211> 66
<212> PRT
<213> Homo sapiens

<400> 4411
Met Thr Leu Val Gly Lys Thr Arg Leu Ser Arg Pro Gly Gln Gly Ala
1 5 10 15

Phe Gly Cys Phe Cys Cys Pro Trp Leu Cys Ser Ala Leu Trp Glu Ala
20 25 30

Pro Gly Arg Pro Asn Val Gln Asp His Arg Gly Glu Ser Glu Leu Asp
35 40 45

Arg Lys Arg Thr Thr Ala Cys Val Gly Pro Leu Pro Thr Ile Lys Ile
50 55 60

Ala Pro
65

<210> 4412
<211> 180
<212> PRT
<213> Homo sapiens

<400> 4412
Met Cys Tyr Gly Arg Cys Ala Arg Cys Ile Gly His Ser Leu Val Trp
1 5 10 15

Leu Ala Ile Leu Cys Ile Val Ala Asn Ile Leu Leu Tyr Phe Pro Asn
20 25 30

Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg Phe Val Trp
35 40 45

Phe Phe Ser Gly Ile Val Gly Gly Gly Leu Leu Val Phe Leu Pro Ala
50 55 60

Phe Val Phe Ile Gly Leu Glu Lys Asp Asp Cys Cys Gly Cys Cys Gly
65 70 75 80

His Glu Asp Cys Gly Lys Arg Cys Ala Met Phe Ser Ser Val Leu Pro
85 90 95

Ala Ala Ile Gly Val Ala Gly Ser Gly Tyr Cys Val Ser Trp Gln Pro
100 105 110

```
Trp Ala Trp Arg Lys Asp His Tyr Val Leu Ile Leu Arg Ala Ser Gly
        115                 120                 125

Thr Thr Pro Leu Pro Thr Pro Met Asp Ser Thr Phe Trp Ile Pro Pro
    130                 135                 140

His Gly Pro Ser Ala Leu Asn Pro His Met Leu Leu Asn Gly Ile Ser
145                 150                 155                 160

Leu Cys Phe Leu Ser Phe Trp Pro Ser Val Glu Leu Asn Ser Ser Cys
                165                 170                 175

Val Ser Phe Lys
            180
```

<210> 4413
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4413
```
Met Cys Leu Ile Gln Gly Met Tyr Leu Ile Thr His Phe Cys Thr Cys
  1               5                  10                  15

Thr Leu Val Trp Phe Cys Asn Leu Gln Phe Ser Asn Gln Ser Phe Ile
            20                  25                  30

Val Thr Phe Ser Leu Pro Val Ser Leu
        35                  40
```

<210> 4414
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4414
```
Met Ser Gly Leu Cys Glu Ser Arg Arg Glu Val Phe Gln Ile Met His
  1               5                  10                  15

Met Asp Val Glu Leu Leu Arg Leu Leu Glu Leu Trp Met Ala Val Leu
            20                  25                  30

Phe Arg
```

<210> 4415
<211> 152
<212> PRT
<213> Homo sapiens

<400> 4415
```
Met Glu Phe Leu Gly Pro Cys Gly Leu Arg Leu Val Glu Ser Arg Leu
  1               5                  10                  15
```

```
Leu Val Pro Tyr Trp Leu Leu Val Leu Leu Ala Ala Leu Asn Ala Leu
            20                  25                  30

Leu Gln Trp Leu Leu Arg Pro Leu Phe Leu Tyr Ala Pro Leu Leu Asn
        35                  40                  45

Pro Tyr Thr Leu Ala Val Ala Ser Thr Thr Phe Thr Val Ser Thr Asp
    50                  55                  60

Lys Ala His Ala Thr Ser Ala Thr Tyr Pro Cys Ser Leu Gly Arg Thr
65                  70                  75                  80

Ala Gly Pro Ala Pro Ser Ala Gly Cys Arg Pro Trp Arg Ala Gln Pro
                85                  90                  95

Gly Asp Val Glu Leu Gly Pro Gly Ala Arg Cys Val Ala Arg Pro Ser
            100                 105                 110

Ile Gln Val Gln Gly Pro Leu Ala Leu Gly Ala Glu Gly Leu Val Leu
        115                 120                 125

His Gln Leu Ala Cys Leu Ala Ala Pro Arg Ala Ser Lys Pro Arg Ala
    130                 135                 140

Ala Ser Leu His Pro His Ala Ser
145                 150
```

4426569.seq

<210> 4416
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4416

```
Met Thr Phe Leu Ile Thr Ile Phe Arg Gln Tyr Leu Gln Trp Ser Cys
  1               5                  10                  15

Ala Pro Leu Leu Leu Pro Val Leu Pro Gln Lys Gly Thr Ser Ser Gly
            20                  25                  30

Asp Ser Thr Gln Asn Leu Phe Ile Leu Ser Glu Glu Ser Ile Ile Gly
        35                  40                  45

Ile Cys Val Tyr Pro Asp Val Glu Ser Tyr Leu Lys Cys Thr Arg Glu
    50                  55                  60

Ile Pro Ile
65
```

<210> 4417
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4417

```
Met Lys Gly His Gln Ser Val Phe Trp Asp Phe Phe Phe Phe Phe Val
  1               5                  10                  15
```

Phe Gly Gly Arg Glu Lys Glu Thr Arg Gln Lys Arg Asn Cys Arg Met
20 25 30

Arg Lys Glu Arg Gly Glu Lys Ser Ser Arg Arg Asn Leu Lys
35 40 45

<210> 4418
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4418
Met Met Asn Thr Leu Ser Gly Ser Gly Gly Cys Trp Ser His Cys Ala
1 5 10 15

Xaa His His Trp His Cys His Pro His Glu Trp Gln Val
20 25

<210> 4419
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4419
Met Ile Ile Tyr Tyr Cys Xaa Leu Xaa Ser Ser Ser Xaa Phe Tyr Ala
1 5 10 15

Thr Val Lys Leu Met Asn Arg Val Val Phe Gly Asn Gly Asn Thr Phe
20 25 30

Val Thr Asp Leu Tyr Thr Val Tyr Ser Ile Gly Lys Met Gly Gly Gly
35 40 45

Phe Leu Ile
50

<210> 4420
<211> 114
<212> PRT
<213> Homo sapiens

<400> 4420
Leu Gly Arg Leu Leu Leu Arg Gly Pro Arg Cys Leu Leu Ser Pro Ala
1 5 10 15

Thr Pro Thr Leu Val Pro Pro Val Arg Gly Met Lys Lys Gly Phe Arg
20 25 30

Ala Ala Phe Arg Phe Gln Lys Glu Leu Glu Arg Trp Arg Leu Leu Arg
35 40 45

Cys Pro Pro Pro Pro Val Arg Arg Ser Glu Lys Pro Asn Trp Asp Tyr
50 55 60

His Ala Glu Ile Gln Ala Phe Gly His Arg Leu Gln Glu Thr Phe Ser
65 70 75 80

Leu Asp Leu Leu Lys Thr Ala Phe Val Asn Thr Cys Tyr Ile Lys Ser
85 90 95

Glu Glu Ala Asn Ala Lys Pro Trp Asn Arg Glu Arg Ser Cys Ser Ser
100 105 110

Glu Ser

<210> 4421
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4421
Met Pro Leu Arg Ser Phe Gln Gln Val Ile Leu Ile Ala Val Gly Val
1 5 10 15

Phe Leu Ser Leu Ala Ala Leu Ala Gly Gly Cys Tyr Phe Leu Val Leu
20 25 30

Arg Tyr Lys Gly Trp
35

<210> 4422
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4422
Met Gly Leu Ser Ala Gln Gln Gly Ala Cys Phe Leu Leu Ser Leu Cys
1 5 10 15

Leu Pro Leu Cys Leu Leu Val Ile Ser Leu Cys Gln Ile Asn Lys Phe
20 25 30

Phe Lys Asn Lys Asn
35

<210> 4423
<211> 206
<212> PRT
<213> Homo sapiens

<400> 4423
Met Thr Ala Gly Trp Leu Val Ile Ala Val Gly Leu Val Arg Ala Tyr
1 5 10 15

Leu Ala Lys Gly Ser Tyr His Ser Leu Tyr Tyr Ser Ile Glu Lys Pro
20 25 30

Leu Lys Phe Phe Gln Thr Gly Ala Leu Leu Glu Ile Leu His Cys Ala
35 40 45

Ile Gly Ile Val Pro Ser Ser Val Val Leu Thr Ser Phe Gln Val Met
50 55 60

Ser Arg Val Phe Leu Ile Trp Ala Val Thr His Ser Val Lys Glu Val
65 70 75 80

Gln Ser Glu Asp Ser Val Leu Leu Phe Val Ile Ala Trp Thr Ile Thr
85 90 95

Glu Ile Ile Arg Tyr Ser Phe Tyr Thr Phe Ser Leu Leu Asn His Leu
100 105 110

Pro Tyr Leu Ile Lys Trp Ala Arg Tyr Thr Leu Phe Ile Val Leu Tyr
115 120 125

Pro Met Gly Val Ser Gly Glu Leu Leu Thr Ile Tyr Ala Ala Leu Pro
130 135 140

Phe Val Arg Gln Ala Gly Leu Tyr Ser Ile Ser Leu Pro Asn Lys Tyr
145 150 155 160

Asn Phe Ser Phe Asp Tyr Tyr Ala Phe Leu Ile Leu Ile Met Ile Ser
165 170 175

Tyr Ile Pro Ile Phe Pro Gln Leu Tyr Phe His Met Ile His Gln Arg
180 185 190

Arg Lys Ile Leu Ser His Thr Glu Glu His Lys Lys Phe Glu
195 200 205

<210> 4424
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4424
Met Ser Gly Thr Thr Ser Gly Leu Gln Leu Cys Leu Val Ile Met Met
1 5 10 15

Asn Cys Val Cys Val Thr Leu Lys Asp Ser Val Cys Gln Val Lys Lys
20 25 30

Asn Asp Val
35

<210> 4425
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4425
Met Glu Leu Ser Arg Leu Trp His Val Gly Phe Val Phe Leu Phe Ser
1 5 10 15

Phe Asp Tyr Val Arg Ala Ile Ser Leu
20 25

<210> 4426
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4426
Met Phe Cys Val Ser Leu Cys Val Cys Val Cys Val Cys Val Arg Val
1 5 10 15

Leu Thr Trp Cys Ser Asp Ala Gln His His Asn Arg Pro Pro Phe Ser
20 25 30

Ser Thr Val Gly Glu
35

<210> 4427
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4427
Met Leu Pro Glu Cys Leu Leu Cys Cys Val Val Val Gly Met Leu Leu
1 5 10 15

His Leu Ser Val Pro Gln Phe Pro Gln Leu
20 25

<210> 4428
<211> 211
<212> PRT
<213> Homo sapiens

<400> 4428
Met Ala Asn Ser Gly Leu Gln Leu Leu Gly Phe Ser Met Ala Leu Leu

```
  1               5                  10                  15

Gly Trp Val Gly Leu Val Ala Cys Thr Ala Ile Pro Gln Trp Gln Met
            20                  25                  30

Ser Ser Tyr Ala Gly Asp Asn Ile Ile Thr Ala Gln Ala Met Tyr Lys
        35                  40                  45

Gly Leu Trp Met Asp Cys Val Thr Gln Ser Thr Gly Met Met Ser Cys
    50                  55                  60

Lys Met Tyr Asp Ser Val Leu Ala Leu Ser Ala Ala Leu Gln Ala Thr
65                  70                  75                  80

Arg Ala Leu Met Val Val Ser Leu Val Leu Gly Phe Leu Ala Met Phe
                85                  90                  95

Val Ala Thr Met Gly Met Lys Cys Thr Arg Cys Gly Gly Asp Asp Lys
            100                 105                 110

Val Lys Lys Ala Arg Ile Ala Met Gly Gly Gly Ile Ile Phe Ile Val
        115                 120                 125

Ala Gly Leu Ala Ala Leu Val Ala Cys Ser Trp Tyr Gly His Gln Ile
    130                 135                 140

Val Thr Asp Phe Tyr Asn Pro Leu Ile Pro Thr Asn Ile Lys Tyr Glu
145                 150                 155                 160

Phe Gly Pro Ala Ile Phe Ile Gly Trp Ala Gly Ser Ala Leu Val Ile
                165                 170                 175

Leu Gly Gly Ala Leu Leu Ser Cys Ser Cys Pro Gly Asn Glu Ser Lys
            180                 185                 190

Ala Gly Tyr Arg Ala Pro Arg Ser Tyr Pro Lys Ser Asn Ser Ser Lys
        195                 200                 205

Glu Tyr Val
    210
```

<210> 4429
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4429
```
Met Ser Phe Thr Ala His Ser Gly Trp Trp Val Ser Leu Leu Phe Trp
  1               5                  10                  15

Val Leu Asp
```

<210> 4430
<211> 63
<212> PRT
<213> Homo sapiens

<400> 4430
Met Val Tyr Asp Ile Phe Ala Ala Tyr Leu Asn Val Phe Lys Phe Leu
1 5 10 15

Ile Ile Leu Leu Ser Ile Val Gly Leu Glu Pro Lys Thr Met Ile Asp
20 25 30

Leu Thr Glu Phe Arg Asn Ser Lys His Leu Lys Gln Gln Gln Tyr Arg
35 40 45

Ala Glu Asn Gln Ile Leu Leu Lys Glu Ala Ser Val Val Val Ser
50 55 60

<210> 4431
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4431
Gly Pro Gly Gln Arg Pro Pro Gly Asp Ala Ala Ala Val Gln Ser Arg
1 5 10 15

Pro Arg Pro Gly Asp Ala Gly Gly Ala Gly Glu
20 25

<210> 4432
<211> 216
<212> PRT
<213> Homo sapiens

<400> 4432
Met Arg Leu Ser Ala Leu Leu Ala Leu Ala Ser Lys Val Thr Leu Pro
1 5 10 15

Pro His Tyr Arg Tyr Gly Met Ser Pro Pro Gly Ser Val Ala Asp Lys
20 25 30

Arg Lys Asn Pro Pro Trp Ile Arg Arg Arg Pro Val Val Val Glu Pro
35 40 45

Ile Ser Asp Glu Asp Trp Tyr Leu Phe Cys Gly Asp Thr Val Glu Ile
50 55 60

Leu Glu Gly Lys Asp Ala Gly Lys Gln Gly Lys Val Val Gln Val Ile
65 70 75 80

Arg Gln Arg Asn Trp Val Val Val Gly Gly Leu Asn Thr His Tyr Arg
85 90 95

Tyr Ile Gly Lys Thr Met Asp Tyr Arg Gly Thr Met Ile Pro Ser Glu
100 105 110

Ala Pro Leu Leu His Arg Gln Val Lys Leu Val Asp Pro Met Asp Arg
115 120 125

Lys Pro Thr Glu Ile Glu Trp Arg Phe Thr Glu Ala Gly Glu Arg Val

```
    130                 135                 140

Arg Val Ser Thr Arg Ser Gly Arg Ile Ile Pro Lys Pro Glu Phe Pro
145                 150                 155                 160

Arg Ala Asp Gly Ile Val Pro Glu Thr Trp Ile Asp Gly Pro Lys Asp
                165                 170                 175

Thr Ser Val Glu Asp Ala Leu Glu Arg Thr Tyr Val Pro Cys Leu Lys
            180                 185                 190

Thr Leu Gln Glu Glu Val Met Glu Ala Met Gly Ile Lys Glu Thr Arg
        195                 200                 205

Lys Tyr Lys Lys Val Tyr Trp Tyr
    210                 215
```

Sequence Listing

<210> 4433
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4433
```
Met Cys Ala Ala Phe Leu Ser Phe Gly Leu Ile His Leu Ile
  1               5                  10
```

<210> 4434
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4434
```
Met Arg Leu Gly Pro Asn Arg Met Arg Gly Arg Val Leu His Ala Trp
  1               5                  10                  15

Leu Pro Leu Leu Leu Leu Leu Leu Leu Leu Gln Cys Thr His His Ser
             20                  25                  30

Ser Gln Leu Leu Leu Leu Leu Leu Ala Tyr Ser Leu Arg Asn Leu Ser
         35                  40                  45

Leu Val Leu
     50
```

<210> 4435
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4435
```
Met Lys Pro Lys Phe Pro Ala Phe Ala Gly Phe Pro Ile Tyr Phe Phe
  1               5                  10                  15

Val Asp Phe Ala Ser
             20
```

<210> 4436
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4436
Met Cys Ala Cys Val Cys Met His Val Cys Ala Cys Ala His Val Cys
1 5 10 15

Val Arg Arg Gly Cys Phe Pro Met Ala Gln Ser Leu Trp Gly Ser Pro
20 25 30

Lys Leu Gln Gly Gln Pro Trp Gly Ala Pro Ser Leu Glu Ser Glu Asp
35 40 45

His Ser Cys Leu
50

<210> 4437
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4437
Met Phe Ser Lys Lys Leu Phe Tyr Ile Gln Ser Ser Leu Phe Ser Leu
1 5 10 15

Leu Tyr Phe Tyr Phe Val Glu Ala Phe Ser Pro Gln Ile Ile Tyr Tyr
20 25 30

Ile Ile Phe Gly Leu Ile
35

<210> 4438
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4438
Met Ser Leu Gly Pro Ser Pro Met Cys Ile Leu Trp Leu Leu Asp Pro
1 5 10 15

Leu Gln Lys Ser Asn Thr Lys
20

<210> 4439
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4439
Met Phe Leu Ala Met Leu Ala Ile Ile Ser Cys Ala Val Cys Phe Ser

```
  1               5                  10                  15

Cys Ala Glu Ala Lys Thr Tyr Trp Ala Tyr Val Pro Lys Pro Pro Ala
             20                  25                  30

Val
```

<210> 4440
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4440

```
Met Ala Leu Phe Arg Ile Phe Leu Val Ala Trp Phe Val Ala Phe Leu
  1               5                  10                  15

Ser Val Arg Lys Leu Asn Pro Ile Leu Arg Ala Leu Glu Glu Leu
             20                  25                  30
```

<210> 4441
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4441

```
Ser Cys His Leu Met Ser Gly Met Tyr Pro Pro Thr Pro Ser Leu Gln
  1               5                  10                  15

Ala Thr Arg Asn Thr Ala Thr His Asn Leu Met Ser Pro Gly Glu His
             20                  25                  30

His Cys Leu Val Ser Ser Gly Ile Pro Arg His
         35                  40
```

<210> 4442
<211> 76
<212> PRT
<213> Homo sapiens

<400> 4442

```
Met Lys Ile Ser Ala Ile Trp Pro Leu Ala Val Phe Phe Ser Met Leu
  1               5                  10                  15

Lys Gln Val Leu Ser Thr Leu Leu Val Leu Tyr Leu Val Leu Tyr Phe
             20                  25                  30

Lys Gly Leu Glu Asn Asn Ser Leu Pro Gly Gly Pro Arg Ile Pro Phe
         35                  40                  45

Met Gly Phe Ile Arg Asp Ser Gly Ile Leu Ile Phe Cys Gln Lys Val
     50                  55                  60

Cys Leu Phe Arg Asp Ser Phe Thr Ile Leu Cys Phe
 65                  70                  75
```

<210> 4443
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4443
Met Thr Ser Ala Cys Leu Ala Trp Thr Ala Val Ser Leu Pro Pro Ala
1 5 10 15

Val Thr His Arg Ala Pro Leu Cys Leu Pro Pro Val Pro Cys Arg Leu
20 25 30

Val Arg Arg Pro Gly Cys Ala Ala Ser Asp Leu Pro
35 40

<210> 4444
<211> 64
<212> PRT
<213> Homo sapiens

<400> 4444
Pro Cys Phe Gly Pro Val Leu Glu Trp Leu Ala Ala Gly Pro Gly Cys
1 5 10 15

Pro Pro Ser Ala Arg Gly Arg Arg Leu Trp His Arg Ser Pro Ala Ser
20 25 30

Glu Ala Thr Pro Arg Leu Leu Pro Thr Val Gly Ala Pro Arg Gly Pro
35 40 45

Ala Leu Arg Gly Ala Ala Ala Lys Lys Pro Gln Ser Gly Gly Ala Gly
50 55 60

<210> 4445
<211> 59
<212> PRT
<213> Homo sapiens

<400> 4445
Met Leu Thr Gln Pro Leu Leu Leu Ser Leu Leu Leu Tyr Cys Ala Cys
1 5 10 15

Arg Leu Val Leu Leu Pro Val Ser Leu Lys Thr Gln Pro Glu Val Gly
20 25 30

Trp Leu Cys Val His Asn Phe Asn Phe Thr Cys Gly Ala Glu Ser Leu
35 40 45

Cys Cys Ile Ser Leu Cys Lys Ser Thr Ile Cys
50 55

<210> 4446
<211> 50
<212> PRT
<213> Homo sapiens

<400> 4446
Met Asp Val Leu Thr Val Ala Phe Leu Ser Ile Leu Ile Thr Ala Pro
1 5 10 15

Ile Gly Ser Leu Leu Ile Gly Leu Leu Gly Pro Arg Leu Leu Gln Lys
20 25 30

Val Glu His Gln Asn Lys Asp Glu Glu Val Gln Gly Glu Thr Ser Val
35 40 45

Gln Val
50

<210> 4447
<211> 66
<212> PRT
<213> Homo sapiens

<400> 4447
Phe Leu Leu Lys His Gly His Pro Pro Leu Met Ala Thr Ala Glu Pro
1 5 10 15

Leu Gly Lys Glu Pro Phe Gly Ile Gln Asn Ser Gln Val Ala Ala Gln
20 25 30

Cys Gly Ile Trp Ser Met Thr Thr Lys Ala Phe Ser Gln His Leu Leu
35 40 45

Lys Glu Ser Gly Val Phe Tyr Thr Leu Leu Met Gly Thr Val His Glu
50 55 60

His Ile
65

<210> 4448
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4448
Met Ser Ser Val Thr Val Glu Ile Phe Val Trp Ser Ala Cys Cys Ile
1 5 10 15

Ser Ser Thr Ser Phe His Pro Phe Leu Ala Phe Ile Arg Leu Lys Phe
20 25 30

Ile Ile Ile Trp Met Ser Phe Arg Ile Gly Thr Val Gly Val Arg Ser
35 40 45

Tyr Cys His Leu Leu Thr Lys Asp Phe Ala Gly Gly Ile Met Cys Gly

```
     50                  55                  60

Cys Tyr Leu
 65
```

<210> 4449
<211> 85
<212> PRT
<213> Homo sapiens

<400> 4449

```
Met Glu Lys Leu Val Leu Val Leu Ala Asn Leu Phe Gly Arg Lys Tyr
  1               5                  10                  15

Ile Pro Ala Lys Phe Gln Asn Ala Asn Leu Ser Phe Ser Gln Ser Lys
             20                  25                  30

Val Ile Leu Ala Glu Leu Pro Glu Asp Phe Lys Ala Ala Leu Tyr Glu
         35                  40                  45

Tyr Asn Leu Ala Val Met Lys Asp Phe Ala Ser Phe Leu Leu Ile Ala
     50                  55                  60

Ser Lys Ser Val Asn Met Lys Lys Glu His Gln Leu Pro Leu Val Lys
 65                  70                  75                  80

Asn Gln Ile His Arg
                85
```

<210> 4450
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4450

```
Met Lys Leu Glu Val Ala Pro Val Phe Cys Trp Ser Cys Cys Ala
  1               5                  10                  15
```

<210> 4451
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4451

```
Tyr Pro Ala Phe Ile Gly Asn Phe
  1               5
```

<210> 4452
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4452

Met Ile Arg Tyr Leu Leu Met Cys Pro Leu Tyr Ile Gln Leu Leu Phe
1 5 10 15

Leu Thr Leu Leu Phe Val Leu Ser Leu Pro
20 25

<210> 4453
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4453
Ile Thr Gly Val Ser His Arg Thr Trp Pro Ser Val Val Phe Leu Ile
1 5 10 15

Ile Trp Lys Lys Ile Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
20 25 30

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
35 40

<210> 4454
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4454
Leu Val His Met Ala Tyr Val Thr Phe Gly Lys Ser Leu Ala Phe Ser
1 5 10 15

Glu Ser Arg Phe Pro Arg Leu
20

<210> 4455
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4455
Tyr Leu Val Phe Leu Phe Gln Tyr Ser Asn Ile Leu
1 5 10

<210> 4456
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4456
Met Tyr Ser Ala Phe His Asn Cys Leu Cys Leu Ala Leu His Val Leu
1 5 10 15

Thr Phe Leu Tyr Asp Val Gly Ser Ser Val Asn Leu Gln Arg Lys Ile
20 25 30

<210> 4457
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4457
Met Leu Leu Met Phe Phe Thr Phe Trp Thr Arg Glu Arg Leu
1 5 10

<210> 4458
<211> 70
<212> PRT
<213> Homo sapiens

<400> 4458
Met Val Gln Lys Trp Arg Leu Leu Leu Asn Leu Leu Thr Leu Pro His
1 5 10 15

Arg Ser Lys Leu Leu Phe Lys Met Cys Leu Thr Pro Tyr Phe Val Phe
20 25 30

Arg Val Leu Asp Ser Tyr Leu Lys Leu Gly Ser Phe Gly Ser Cys Leu
35 40 45

Ile Phe Cys Ser Ala Leu Arg Leu Ser Leu Pro Ser Thr Tyr Ser Gly
50 55 60

Phe Val Cys Gln Phe Phe
65 70

<210> 4459
<211> 53
<212> PRT
<213> Homo sapiens

<400> 4459
Met Glu Leu Thr Ile Gly Thr Phe Arg Ile Met Met Ile Asn Trp Leu
1 5 10 15

Val Phe Ser Gln His Cys Gln Leu Phe Leu Arg Ser Leu Leu Leu Pro
20 25 30

Leu Leu Leu Cys Thr His His Val Cys Met Glu Cys Ala Arg Arg Gly
35 40 45

Arg Gly Ser Gly Arg
50

<210> 4460

<211> 18
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4460
Met Ile Leu Leu Leu Leu Arg Leu Xaa Cys Ile Leu Lys Gln Leu Ala
1 5 10 15

Phe Phe

<210> 4461
<211> 61
<212> PRT
<213> Homo sapiens

<400> 4461
Met Leu Cys Ala Met Leu Ala Cys Gly Gly Leu Cys Asn Ala Leu Thr
1 5 10 15

Cys Met Glu Glu Ala Arg Leu Arg Ala Glu Met Trp Pro Glu Pro Ser
20 25 30

Leu Tyr Arg Ser Phe Asn Leu Glu Leu Ser Arg Cys His Phe Leu Pro
35 40 45

Leu Cys Leu Leu Val Val Ser Asp Ile Tyr Ser Lys Gln
50 55 60

<210> 4462
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4462
Met Leu Leu Asp Ala Pro Ala Ile Ile Phe Leu Leu Val Ala Phe Pro
1 5 10 15

Asn Tyr Phe His Lys Asn Tyr Phe Ser Tyr Tyr Met
20 25

<210> 4463
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4463
Met Ala Tyr Phe Tyr Leu Leu Gly Val Leu Gln Val Leu Pro Ser Leu
1 5 10 15

His His Tyr Met Ser Ser Glu Val Leu Phe
20 25

<210> 4464
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4464
Met Leu Cys Leu Phe Leu Leu Ala Ser Ile Thr Ile
1 5 10

<210> 4465
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4465
Met Lys Ile Leu Leu Leu Cys Leu Cys Leu Ile Leu Leu Arg Val Arg
1 5 10 15

Ser Cys Arg Arg Lys Ala Ala Arg Ala Ala Leu Gly Met Glu Ala Ala
20 25 30

Asp Ala Val Thr Asp
35

<210> 4466
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4466
Met Ile Leu Met Met Val Ile Arg Phe Leu Leu Val Pro Leu Leu Ile
1 5 10 15

Pro Thr Thr Asp Leu His Ala Thr Ala Asn Ser Ser
20 25

<210> 4467
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4467
Met Tyr Phe Phe Cys Phe Cys Gly Phe Ala Cys Ser Gly Tyr Phe Leu
1 5 10 15

<210> 4468
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4468
Met Arg Ser Cys Arg Leu Ala Arg Gly Gln Leu Glu Leu Cys Trp Leu
1 5 10 15

Leu Ile Ile Ile Leu Lys Gly Ser Glu Ile Cys Asp Gly Ile Arg Phe
20 25 30

<210> 4469
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4469
Met His Met Glu Tyr Leu Leu Val Leu Leu Asn Leu Thr Ser His Pro
1 5 10 15

Glu Cys Ile Asp Arg Lys Ser Met Ser Tyr Leu Lys Leu
20 25

<210> 4470
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4470
Met His Leu Ile Trp Leu Cys Val Thr Gly Leu Phe Ile Ser Ala Thr
1 5 10 15

Glu Ile His Ala Val Cys Thr Tyr Asn Arg Tyr Ile Val Ser Ala Tyr
20 25 30

<210> 4471
<211> 91
<212> PRT
<213> Homo sapiens

<400> 4471
Met Val Gln Thr Ala Leu Ala Trp Trp Pro Ser Ser His Gln Pro Thr
1 5 10 15

Ser Gly Asn Val Ser Val Tyr Cys Trp Pro Tyr Ser Val Thr Asn Pro
20 25 30

Ala Ala Pro Cys Ile Ser Trp Leu Pro Thr Pro Thr Ser Pro Trp Thr

```
         35                  40                  45

Ser Pro Val Glu Pro Gly Ser Asp Pro Asp Ser Val Pro Ala Phe Gln
     50                  55                  60

Glu Lys Leu Ser His Phe Leu Gln Ala Ser His Arg Ser Leu Pro Arg
 65                  70                  75                  80

Met Trp Ala Ala Cys Ser Ser Asn Ser Thr Ser
                 85                  90
```

<210> 4472
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4472

```
Met Phe Val Thr Gly Lys Ile Val Thr Trp Val Asn Phe Ile Ser Ser
  1               5                  10                  15

Asn Ser Phe Leu Val Leu Ile Leu Ser Met Leu Pro Lys Ser Ser Leu
             20                  25                  30

Ile Ser Met Asn His Cys Phe Met
         35                  40
```

<210> 4473
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4473

```
Met Phe Leu Thr Val Phe Leu Phe Val Ile Leu Phe Met Tyr Ala Phe
  1               5                  10                  15

Ile Phe Val Ile Thr Phe Phe Phe Thr Leu Asp Leu Leu Leu Ser Phe
             20                  25                  30

Leu Ser Pro Ser Phe Leu Gly Gly Arg Gln Gly His
         35                  40
```

<210> 4474
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4474

```
Met Asn Val Arg Tyr Trp Asp Arg Asp Pro Asn Leu Lys Gln Gln Pro
  1               5                  10                  15

Val Pro Val Val Thr
             20
```

<210> 4475
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4475
Asn Leu Phe Val Ser Val Tyr Asp Ser Phe Phe Ser Leu Val Gln Ser
1 5 10 15

Ser Ala Ser Pro Ala Leu Ser Ser Thr Leu Gln Ser Pro Phe Arg Glu
20 25 30

Ser Ile Ser Arg Asn Glu Thr Arg Gln Ser Cys Ser Ala Pro
35 40 45

<210> 4476
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4476
Met Asn Phe Tyr Val Thr Leu Tyr Arg Val Phe Pro Leu Ala Phe Ser
1 5 10 15

Leu Ser Leu Thr Leu Ser Leu Asn Phe Leu Arg Leu His Asn Ser Ile
20 25 30

Met Lys Phe Thr
35

<210> 4477
<211> 47
<212> PRT
<213> Homo sapiens

<400> 4477
Met Lys Tyr Gln Ser Glu Trp Lys Asp Val Ile Leu Leu Leu His Val
1 5 10 15

Pro Ser Pro Ser Phe His Gly Gly Thr Ala Leu Pro Ile Leu Ser Phe
20 25 30

Val Tyr Ala Trp Pro Ile Leu Arg Ser Ser Gly Asp Lys Pro Glu
35 40 45

<210> 4478
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4478
Leu Gly Leu Trp Ala Leu Leu Ala Gly Leu Thr Leu Pro Val Arg Ala
1 5 10 15

Glu Pro Gly Trp Gln Glu Gly Arg Thr Val Tyr Leu Leu Leu Arg Ala

```
            20                  25                  30

Pro Lys Ala Leu Leu
        35


<210> 4479
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4479
Met Pro Ala Cys Phe Val Ser Phe Ser Val Phe Phe Cys Ala Thr Val
  1               5                  10                  15

Pro Cys Ala Gly Ser Met Pro Ala Ser Trp His His Leu Gln Cys
            20                  25                  30


<210> 4480
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4480
Met Ile Gly Thr Leu His Leu Ser Leu Ser Val Ile Leu Ala Ser Val
  1               5                  10                  15

Leu Phe Ala Tyr Gln Asn Ala Val Cys Phe Cys Gln Arg Ile Thr Ile
            20                  25                  30

Lys Pro Leu Arg Pro Asn
        35


<210> 4481
<211> 310
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4481
Met Val Tyr Lys Thr Leu Phe Ala Leu Cys Ile Leu Thr Ala Gly Trp
  1               5                  10                  15
```

Arg Val Gln Ser Leu Pro Thr Ser Ala Pro Leu Ser Val Ser Leu Pro
20 25 30

Thr Asn Ile Val Pro Xaa Thr Xaa Ile Trp Thr Ser Ser Pro Gln Asn
35 40 45

Thr Asp Ala Asp Thr Ala Ser Pro Ser Asn Gly Thr His Asn Asn Ser
50 55 60

Val Leu Pro Val Thr Ala Ser Ala Pro Thr Ser Leu Leu Pro Lys Asn
65 70 75 80

Ile Ser Ile Glu Ser Arg Glu Glu Glu Ile Thr Ser Pro Gly Ser Asn
85 90 95

Trp Glu Gly Thr Asn Thr Asp Pro Ser Pro Ser Gly Phe Ser Ser Thr
100 105 110

Ser Gly Gly Val His Leu Thr Thr Thr Leu Glu Glu His Ser Xaa Gly
115 120 125

Thr Pro Glu Ala Gly Val Ala Ala Thr Leu Ser Gln Ser Ala Ala Glu
130 135 140

Pro Pro Thr Leu Ile Ser Pro Gln Ala Pro Ala Ser Ser Pro Ser Ser
145 150 155 160

Leu Ser Thr Ser Pro Pro Glu Val Phe Ser Ala Ser Val Thr Thr Asn
165 170 175

His Ser Ser Thr Val Thr Ser Thr Gln Pro Thr Gly Ala Pro Thr Ala
180 185 190

Pro Glu Ser Pro Thr Glu Glu Ser Ser Ser Asp His Thr Pro Thr Ser
195 200 205

His Ala Thr Ala Glu Pro Val Pro Gln Glu Lys Thr Pro Pro Thr Thr
210 215 220

Val Ser Gly Lys Val Met Cys Glu Leu Ile Asp Met Glu Thr Thr Thr
225 230 235 240

Thr Phe Pro Arg Val Ile Met Gln Glu Val Glu His Ala Leu Ser Ser
245 250 255

Gly Ser Ile Ala Ala Ile Thr Val Thr Val Ile Ala Val Val Leu Leu
260 265 270

Val Phe Gly Val Ala Ala Tyr Leu Lys Ile Arg His Ser Ser Tyr Gly
275 280 285

Arg Leu Leu Asp Asp His Asp Tyr Gly Ser Trp Gly Asn Tyr Asn Asn
290 295 300

Pro Leu Tyr Asp Asp Ser
305 310

<210> 4482

<211> 25
<212> PRT
<213> Homo sapiens

<400> 4482
Met Val Val Phe Val Phe Leu Pro Leu Leu Trp Leu Leu Gln Leu Pro
1 5 10 15

Leu Ser Gly Thr Arg Arg Thr Ile Leu
20 25

<210> 4483
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4483
Met Leu Cys Val Leu Ser Ser Phe Leu Leu Ile Phe Leu Phe Leu Ile
1 5 10 15

Cys Val Gln Phe Cys Ala Ala Leu Leu Ala Leu Leu Leu
20 25

<210> 4484
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4484
Glu Trp Thr Leu Arg Tyr Phe Arg Cys Val Leu Phe Ser Ile Ala Ala
1 5 10 15

Val Phe Val Thr Val Leu Val Met Val His Val His Ile Leu Leu
20 25 30

<210> 4485
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4485
Glu Trp Thr Leu Arg Tyr Phe Arg Cys Val Leu Phe Ser Ile Ala Ala
1 5 10 15

Val Phe Val Thr Val Leu Val Met Val His Val His Ile Leu Leu
20 25 30

<210> 4486
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4486

Met Gln Leu Ser Leu Pro Lys Ile Phe Phe Tyr Leu Cys Phe Cys Leu
1 5 10 15

Gln Leu Leu Pro Leu Glu Val Ser Leu Ser Phe Lys Phe Arg Glu Pro
20 25 30

Cys Leu Trp His
35

<210> 4487
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4487
Met Val His Pro Leu Val Ala Leu Trp Pro Trp Ala Ser Phe Phe Asn
1 5 10 15

Phe Leu Ile Tyr Thr Val Asn Ser Thr Tyr Ile Ile Gly Leu Val
20 25 30

<210> 4488
<211> 72
<212> PRT
<213> Homo sapiens

<400> 4488
Met Leu Leu Ser Ile Ala Ile Trp Val Ala Trp Ile Thr Leu Leu Met
1 5 10 15

Leu Pro Asp Phe Asp Arg Ser Gly Met Thr Pro Ser Ser Ala Pro Pro
20 25 30

Trp Leu Pro Met Ala Gly Cys Ser Cys Trp Leu Met Leu Val Pro Ser
35 40 45

Phe Gly Cys Ser Gln Ser Asn Glu Thr Pro Trp Ile Ile Leu Leu Arg
50 55 60

Met Leu Ser Val Asn Leu Asn Ser
65 70

<210> 4489
<211> 58
<212> PRT
<213> Homo sapiens

<400> 4489
Met Ser His Arg Ala Gln Pro Thr Phe Thr Ser Lys Val Tyr Val Met
1 5 10 15

Val Val Ile Phe Ser Leu Leu Glu Tyr Ile Lys Trp Leu Ile Trp Gly
20 25 30

Gly Lys Leu Ile Leu Asn Ile Asn Gly Gly Glu Lys Gly Thr Val Phe

```
         35                  40                  45

Thr Leu Lys Cys Lys Ser Glu His Thr Lys
     50                  55
```

<210> 4490
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4490

```
Met Thr Thr Cys Lys Glu Leu Cys Pro Trp Asn Phe Val Trp Phe Phe
  1               5                  10                  15

Phe Val Phe Asp Leu Leu Gly Arg Met Ser Asn Ile Tyr Lys Ser Arg
             20                  25                  30

Leu Asn Ser Glu Met Asn Ile Gln Ile Ser Ile Ile Gln Arg Leu Leu
         35                  40                  45

Leu
```

<210> 4491
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4491

```
Met Ile Thr Cys Ser His Gly Gln Ile Phe Phe Ser Pro Cys Ser Ser
  1               5                  10                  15

Trp Pro Glu Thr Arg Glu Thr Arg Val Lys Ser Tyr Leu Pro Leu Pro
             20                  25                  30

Val Met Pro
         35
```

<210> 4492
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4492

```
Met Ala Leu Thr Leu Pro Ser Gln Trp Val Phe Leu Val Phe Ile Leu
  1               5                  10                  15

Asp Asp Leu Tyr Ala His Leu Ser Leu Ser Arg Asn Phe Cys Trp Lys
             20                  25                  30

His Leu Leu Phe
         35
```

<210> 4493
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4493
Met Ile Trp Asn Arg Ser Leu Leu Leu Ala Ile Tyr Phe Leu Cys Gly
1 5 10 15

Leu Arg Gln Val Thr Tyr Phe Ser Glu Ser Pro Phe Leu Asn Leu Phe
20 25 30

Val Asn

<210> 4494
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4494
Met Phe Asn Pro Leu Ser Pro His Pro Asp Leu Phe Leu Leu Ser His
1 5 10 15

Leu Ile

<210> 4495
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4495
Leu Glu Phe Phe Phe Phe Phe Phe Val Leu
1 5 10

<210> 4496
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4496
Met Phe Leu Asp Phe Cys Trp Gln Ala Cys Ser Ser Ile Cys Met Ala
1 5 10 15

Pro Ser Pro His Leu His Phe Ser Ala Gln Met Leu Pro Ser Pro
20 25 30

<210> 4497
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4497
Asn Leu Gln Phe Ser Met Thr Gln Leu
1 5

<210> 4498
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4498
Met Ser Val
1

<210> 4499
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4499
Met Leu Ala Ile Ile Thr Phe Leu Lys Ala His Leu Gly Thr His Asn
1 5 10 15

Met Gly Gln Asp Gln Arg Val Glu Thr Ser
20 25

<210> 4500
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4500
Met Cys Phe Leu Cys Val
1 5

<210> 4501
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4501
Met Ala Ile Ser Leu Val Thr Leu Leu Phe Pro Leu Leu Ser Ser Gln
1 5 10 15

Phe Asn Leu Pro Thr Glu Tyr Gln Ala
20 25

<210> 4502
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4502
Pro Pro Asn Leu Cys Leu Thr Phe Leu Leu Pro Phe Val Leu Leu Arg
1 5 10 15

Leu Ser Val Leu Gly Asn Thr Val Phe Leu Arg Val Cys Gly Gly Ser
20 25 30

Tyr Pro Ser Ser Phe Arg Thr Arg Asp Leu Leu Asp Trp Ser Gly Pro
35 40 45

Gln Thr Asp Pro Cys Ser Leu Thr Thr Gly Tyr Pro Gly Thr Cys Val
50 55 60

Pro Ser Leu
65

<210> 4503
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4503
Met Leu Val Ser Pro Arg Arg Val Tyr Phe Leu Asp Leu Thr Cys Phe
1 5 10 15

Val Ala Phe Leu Leu Leu Val Gln Cys Ser Val Leu Thr Val Cys Pro
20 25 30

Gln Val Thr Glu Glu Glu
35

<210> 4504
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4504
Met Asn Ile Thr Ser His Gln Pro Pro His His Asn Phe Met Leu Leu
1 5 10 15

Leu Asp Ile Ile Phe Val Leu Ala Trp Ile Leu Met Leu Leu Thr Asn
20 25 30

Ile Ser

<210> 4505
<211> 61
<212> PRT
<213> Homo sapiens

<400> 4505
Met Val Thr Ile Phe Asn Ile Ile Thr Thr Thr Thr Ile Leu Pro Thr
1 5 10 15

```
Gln Leu Ser Gln Phe Leu Leu Pro Leu Val Ile Leu Leu Ala Leu Trp
            20                  25                  30

Lys Asp Leu His Lys Tyr Lys His Leu Val Glu Gln Ile Val Val Leu
        35                  40                  45

Val Pro Ala Ile Met Asn Ser Arg His Cys Gln Trp Thr
    50                  55                  60
```

<210> 4506
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4506

```
Met Trp Leu Trp Thr Ser Pro Trp Arg Ser Gly Leu Cys Trp Ile Leu
  1               5                  10                  15

Leu Arg Gly Thr Ser Thr Glu Met
            20
```

<210> 4507
<211> 87
<212> PRT
<213> Homo sapiens

<400> 4507

```
Met Tyr Ile Ala His His Leu Leu Thr Leu Gly His Gln Phe Arg Leu
  1               5                  10                  15

Arg Leu Ala Pro Ile Leu Cys Asp Gly Thr Ala Thr Phe Val Asp Leu
            20                  25                  30

Val Pro Gly Phe Arg Arg Leu Gly Thr Glu Cys Phe Leu Ala Gln Met
        35                  40                  45

Arg Ala Gln Lys Val Asn Phe Trp Lys Asp Tyr Gln Val Leu Gly Thr
    50                  55                  60

Phe Gln Ile Trp Thr Met Lys Arg Ile Ile Leu Gln Gln Val Lys Gln
65                  70                  75                  80

Ser Gly Arg Tyr Cys Thr Asn
                85
```

<210> 4508
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4508

```
Met Phe Arg Pro Trp His Gly Leu Leu Pro Gly Ser Arg Leu Val Pro
  1               5                  10                  15

Trp Gly Leu Val Arg Leu Val Gly Ala Pro Asn Pro Cys Ala His
```

20 25 30

<210> 4509
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4509
Met Phe Ile Ala Cys Leu Leu Gln Ser Leu Cys Ile
1 5 10

<210> 4510
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4510
Met Val Phe Gln Thr Phe Tyr Cys Ile Ser Leu Val Leu Phe Ala His
1 5 10 15

Glu Val Ser Leu Leu Cys Val Cys Val Tyr Val Tyr
20 25

<210> 4511
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4511
Met Leu Cys Phe Ser Phe Leu Cys Leu Ser Leu Leu Leu Val Ser Ala
1 5 10 15

Gln Gly

<210> 4512
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4512
Met Leu Cys Phe Ser Phe Leu Cys Leu Ser Leu Leu Leu Val Ser Ala
1 5 10 15

Gln Gly

<210> 4513
<211> 23
<212> PRT
<213> Homo sapiens

EFS: 3.0.5.3.6.0.5.3.6.9

<400> 4513
Met Ser Ser Ile Cys Pro Ile Phe Val Leu Leu Gln Met Ile Ser Phe
1 5 10 15

Met Thr Leu Ile Ala Leu Glu
20

<210> 4514
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4514
Met His Thr Tyr Ile Leu Val Cys Ile Cys Ile His Ile Tyr Leu Cys
1 5 10 15

Val Tyr Ala Tyr Ile Tyr Thr Cys Met Cys Met Tyr Ile Cys Ile His
20 25 30

Ile Tyr Leu Tyr Val Tyr Val His Met His Thr Tyr Ile Tyr Thr His
35 40 45

Thr Tyr Thr His Ala Tyr Phe Phe Ser Gln Leu Gly Lys Gly Arg Ile
50 55 60

Cys Arg Leu
65

<210> 4515
<211> 112
<212> PRT
<213> Homo sapiens

<400> 4515
Met Ala Leu Gly Val Pro Ile Ser Val Tyr Leu Leu Phe Asn Ala Met
1 5 10 15

Thr Ala Leu Thr Glu Glu Ala Ala Val Thr Val Thr Pro Pro Ile Thr
20 25 30

Ala Gln Gln Gly Asn Trp Thr Val Asn Lys Thr Glu Ala Asp Asn Ile
35 40 45

Glu Gly Pro Ile Ala Leu Lys Phe Ser His Leu Cys Leu Glu Asp His
50 55 60

Asn Ser Tyr Cys Ile Asn Gly Ala Cys Ala Phe His His Glu Leu Glu
65 70 75 80

Lys Ala Ile Cys Arg Cys Phe Thr Gly Tyr Thr Gly Glu Arg Cys Leu
85 90 95

Lys Leu Lys Ser Pro Tyr Asn Val Cys Ser Gly Glu Arg Arg Pro Leu
100 105 110

<210> 4516
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4516
Val Ala Phe Phe Thr Met Pro Thr Val Val Leu Val Ser Met Phe Asp
1 5 10 15

Phe Phe Phe Ser Gly Ile Ser Ser Ser Phe Val Asn Ile Arg Leu Gln
20 25 30

Phe Phe

<210> 4517
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4517
Met Gln Leu Val Tyr Val Leu Trp Leu Leu Ile Ile Lys Val Thr Lys
1 5 10 15

Gly Lys Val Glu Lys Ile Thr Ala Met Gln Ser Arg Thr Glu Lys Glu
20 25 30

Ala Ser Ser Ile
35

<210> 4518
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4518
Met Asn Ala Val Thr Leu Pro Ile Leu Phe Thr Phe Val Ser Pro Val
1 5 10 15

Pro Ile Val Val His Gly Ala Glu Trp Pro Phe Asn Lys Tyr Leu Leu
20 25 30

Asn Lys

<210> 4519
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4519

Met Gln Glu Ile Leu Pro Pro Gly Ser His Thr Gly Phe Ser Gly Leu
1 5 10 15

His Leu Pro Phe Ile Gly Phe Thr Phe Thr Thr Glu Arg Tyr Val Trp
20 25 30

Ile Tyr His Ser Pro Gly Arg His Phe Pro Cys Gly Arg
35 40 45

<210> 4520
<211> 65
<212> PRT
<213> Homo sapiens

<400> 4520
Met Ile Trp Leu Ser Val Cys Leu Leu Leu Val Tyr Lys Asn Ala Cys
1 5 10 15

Asp Phe Cys Thr Leu Ile Leu Tyr Pro Glu Thr Leu Leu Lys Leu Leu
20 25 30

Ile Ser Leu Arg Arg Phe Trp Ala Glu Thr Met Gly Phe Ser Arg Tyr
35 40 45

Thr Ile Met Ser Ser Ala Asn Arg Asp Asn Leu Thr Ser Ser Phe Pro
50 55 60

Asn
65

<210> 4521
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4521
Met Lys Ser Cys Gln Asp Ser Asp Ser Pro Phe Pro Val Ile Leu Leu
1 5 10 15

Met Ile Ser Pro Asn Thr Leu Gln Ala Thr Val Thr Thr Lys Asn Thr
20 25 30

Val Ser Ala Gly Leu
35

<210> 4522
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4522
Met Tyr Leu Phe Arg Trp Phe Phe Val Val Thr Tyr Phe Ile Val Leu
1 5 10 15

Ile Ser Cys Phe Cys Ile Thr Val Pro Ile Ala Asn Lys Ser Leu Gly

20 25 30

Gln Phe Ala Phe Leu Lys Lys Lys Lys Lys Lys
35 40

<210> 4523
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4523
Met Gly Leu Leu Asp Trp Leu Leu Gly Asn Ser
1 5 10

<210> 4524
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4524
Met Gly Asn Leu Leu Leu Leu Gln Leu Met Leu Leu Lys Leu Leu Thr
1 5 10 15

Val Ile Pro Phe Pro Trp Leu Phe Phe Gly Glu Lys Ile Ile Cys Ser
20 25 30

<210> 4525
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4525
Met Phe Pro
1

<210> 4526
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4526
Gly Arg His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu Val
1 5 10 15

Pro Leu Leu His Trp Asn Ile Arg Arg
20 25

<210> 4527

<211> 10
<212> PRT
<213> Homo sapiens

<400> 4527
Met Gln Ala Gly Trp Leu Gly Gln Val Gly
1 5 10

<210> 4528
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4528
Met Leu Thr Leu Cys Val Cys Val Cys Val Cys Val Cys Thr Arg Ala
1 5 10 15

Cys Ala Cys Leu Leu His Gly Ile Leu Phe Cys Glu Ile Pro Leu Gln
20 25 30

Ser Cys Gln Asn Leu Pro Pro Cys Pro Ser His Thr Val Gly Ser Ala
35 40 45

Leu

<210> 4529
<211> 54
<212> PRT
<213> Homo sapiens

<400> 4529
Met Leu Gln Tyr Lys Ala Leu Ser Met Ser Gly Lys Ser Leu Leu Gln
1 5 10 15

Lys Arg Leu Gln Ile Thr Leu Thr Cys Ala Trp Leu Cys Trp Met Val
20 25 30

Tyr Ser Val Ser Phe Phe Phe Met Gly Glu Thr Ala His Arg Ala His
35 40 45

Gln Gln Val Leu Gln Asn
50

<210> 4530
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4530
Met Leu Gly Asp Ser Ser Leu Ala Leu Val Trp Leu Gly Leu Cys Leu
1 5 10 15

Pro Pro Trp Gly Lys Pro Gly Thr Pro Leu Leu Pro Ala Leu Pro Arg
20 25 30

Pro Leu Ser Leu Gly Gly Trp
35

<210> 4531
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4531
Asp Ala Trp Gly Trp Gly Glu Leu Leu Leu Ile Val Lys Asn Ser Leu
1 5 10 15

Gly Ala Ser Asp Leu Met Pro Ser Ile Leu Ser Gly Phe Ser Leu
20 25 30

<210> 4532
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4532
Met Tyr Asn Leu Leu Tyr Phe Pro Leu Cys Ile Leu Leu Trp Val Phe
1 5 10 15

Cys Gly Ser Gln Asp Ser Ser Leu Arg Phe Ile Ser His Glu Ser
20 25 30

<210> 4533
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4533
Met Pro Ser Ala Arg His Cys Ile Ala Ile Ile Ser Phe Asn Leu Leu
1 5 10 15

Leu Ile Leu Trp Val Gly Ile Phe Ile Leu Ile Ser Glu Thr Arg Lys
20 25 30

Leu Arg Val Arg Glu Asn
35

<210> 4534
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4534
Met Ser His Phe His Ser Gln Asn Gln Met Tyr Leu Phe Ser Ala Phe
1 5 10 15

Leu Trp Glu Leu Leu Leu Ser Ala Gly Ile Leu Lys Pro Asn Ile His

```
            20                  25                  30

Phe Gln Phe Phe Gln Leu Leu Ser
        35                  40
```

<210> 4535
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4535

```
Met Gln Lys Val Thr Thr Leu Arg His Ile Glu Asn Cys Leu Ala Gly
  1               5                  10                  15

Lys Cys
```

<210> 4536
<211> 88
<212> PRT
<213> Homo sapiens

<400> 4536

```
Met Lys Thr Val Ser Ser Arg Met Val Leu Glu Val Thr Met Met Leu
  1               5                  10                  15

Met Thr Gly Leu Leu Gly Met Glu Leu Val Ala Ser Gly Ala Thr Asp
            20                  25                  30

Gly Pro Thr Gly Met Arg Ala Thr Asn Arg Asn Phe Asp Ser Ile Trp
        35                  40                  45

Gln Asn Arg Ile Ser Asn Leu Asn Ser Leu Ser Thr Ser Ser Phe Cys
     50                  55                  60

Tyr Lys Gly Lys Pro Ser Gly Asn Val Glu Ala Cys Ala Pro Arg Ser
 65                  70                  75                  80

Pro Glu Lys Gly Asn Arg Arg Gly
                85
```

<210> 4537
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4537

```
His Thr Phe Leu Trp Phe Leu Tyr Val Cys Ser Asn
  1               5                  10
```

<210> 4538
<211> 55
<212> PRT

<213> Homo sapiens

<400> 4538
Met Ser Gly Trp Gln Ala Trp Tyr Leu Ala Arg Ala Leu Ala Val Gly
1 5 10 15

Val Leu Met Gly Cys Thr Asp His Thr Ala Tyr Val Leu Ala Ile Pro
20 25 30

Ser Cys Ser Pro Ala Arg Ser Leu Lys His Thr Ser Leu Ala Phe Leu
35 40 45

Phe Phe Cys Ser Phe Phe Asn
50 55

<210> 4539
<211> 80
<212> PRT
<213> Homo sapiens

<400> 4539
Met Gly Arg Met Ala Ile Leu Ala Cys Ser Leu Pro Thr Thr Trp Ser
1 5 10 15

Ser Leu Ser Glu Ala Glu Gly Thr Ser Cys Pro Ser Pro Leu Arg His
20 25 30

Gly Phe Leu Ile Ala Gly Arg Gly Gly Leu Gly Val Asp Ile Gln His
35 40 45

Ser Ser Arg Asn Arg Thr Pro Ser Glu Asp Glu Ala Ser Gly Leu Pro
50 55 60

Pro Ala Trp Gln Thr Gln Pro Val Thr Pro Asn Ala Ala Met Ala Trp
65 70 75 80

<210> 4540
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4540
Met Val Val Leu Leu Glu Ile Phe Leu Leu Leu Ala Tyr Val Leu Trp
1 5 10 15

Asn Tyr Thr Cys Ile Thr Asn Asp
20

<210> 4541
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4541
Met Leu Ala Thr Gln His Thr Leu Glu His Trp Leu Phe Thr Leu Leu
1 5 10 15

Met Val Trp Leu Pro Ser Ile Lys Ser Tyr His Thr Ala Asn Arg
20 25 30

<210> 4542
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4542
Met His Leu Leu Phe Leu Phe Val Pro Met Tyr Gln Cys Arg Val Ala
1 5 10 15

Leu Phe Ser Ser Thr Val Phe Ile Ala Ala Phe Leu Ser Ile Asn Leu
20 25 30

Ser His Cys Ile Phe Tyr Lys
35

<210> 4543
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4543
Arg Ile Arg Ala Arg Cys Leu Ala Val Ala Ala Cys Ser Arg Gly Arg
1 5 10 15

Val Gly Leu Ser Arg Gly Trp Cys Cys Arg Cys Ser Arg Cys Arg Gln
20 25 30

Ser Gly Arg Arg His Gly Phe Trp
35 40

<210> 4544
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4544
Met Ala Gly Leu Ser Leu Pro Thr Leu Phe Phe Phe Asn Met Ile Leu
1 5 10 15

Asp Cys Leu Gly Pro Trp Glu Asn Ser Ile Tyr Ile Leu Lys Ser Val
20 25 30

Phe Thr Phe Leu Gln Ile Lys Arg Pro Leu Gly Phe
35 40

<210> 4545
<211> 2
<212> PRT
<213> Homo sapiens

<400> 4545
Met Leu
1

<210> 4546
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4546
Met Phe Leu Tyr Val Ser Val Val Phe Leu Ile Leu Leu Leu Asn Ser
1 5 10 15

Ser Gln Leu Cys Lys Tyr Thr Ala Ile Tyr Leu Tyr Thr Tyr Phe
20 25 30

<210> 4547
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4547
Met Ser Ile Pro His Leu Trp Cys His Phe Phe Thr Phe Leu Leu Pro
1 5 10 15

Cys Ile Lys Arg Gln Lys Ile His Ile Lys Leu Cys His Val Phe
20 25 30

<210> 4548
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4548
Met Ala Cys Leu Glu Leu Leu Ile Leu Val Ser Phe Leu Thr Ser Val
1 5 10 15

Ile Gln Thr Gln Pro Pro Arg Glu Leu Asp Pro Ser Leu Phe Ser Val
20 25 30

Phe Ser Leu Ala
35

<210> 4549
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4549
Met Ala Cys Leu Glu Leu Leu Ile Leu Val Ser Phe Leu Thr Ser Val
1 5 10 15

Ile Gln Thr Gln Pro Pro Arg Glu Leu Asp Pro Ser Leu Phe Ser Val
20 25 30

Phe Ser Leu Ala
35

<210> 4550
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4550
Met His Ala Leu
1

<210> 4551
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4551
Met Ile His Arg Leu Gln Lys Leu Tyr Glu Leu Arg
1 5 10

<210> 4552
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4552
Met Tyr Phe Ile Cys Asn Leu Leu Leu Leu Leu Gly His Ile Tyr Val
1 5 10 15

Tyr Ile Trp Met Ser Val Tyr Ile Tyr Met Tyr Lys
20 25

<210> 4553
<211> 74
<212> PRT
<213> Homo sapiens

<400> 4553
Met Lys Asp Phe Val Val Thr Gly Lys Arg Asn Pro Asp Cys Val Phe
1 5 10 15

Ser Leu Gln Gly Cys Pro Gln Arg Ser Tyr Ser Leu Trp Leu Leu Leu
20 25 30

Trp Val Ile Gly Asp Asn Val Leu Lys Lys Val Leu Phe Phe Cys Leu

35 40 45

Leu Lys Asn Arg Ile Leu Lys Val Ile Ser Gln Lys Lys Trp Pro Ser
50 55 60

Val Lys Gly Leu Phe Pro Met Cys Ser Ala
65 70

<210> 4554
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4554
Met Val Phe Pro Phe Leu Ser Phe Ala Ser Ser Cys Thr Leu Ser Met
1 5 10 15

Val Phe Ser Asp Ser Ile Phe Leu Asn Ser Leu Phe Ile Phe Leu Gly
20 25 30

Asn Phe Leu Leu
35

<210> 4555
<211> 73
<212> PRT
<213> Homo sapiens

<400> 4555
Met Leu His Ile Leu Phe Met Gly Leu Arg Val Asn Leu Asn His Glu
1 5 10 15

Thr Phe Leu Ile Ile Cys Cys Glu Ile Tyr Gln Ala Trp Met Ile Ser
20 25 30

Val Phe Leu Val Val Cys Cys Phe Phe Lys Glu Val Ile Gln Val Pro
35 40 45

Leu Leu Ser Cys Gln His Thr Lys Leu Leu Lys Lys Leu Thr Ile Ser
50 55 60

Phe Arg Ser Asn Ser Gln Pro Val Glu
65 70

<210> 4556
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4556
Ser Cys Ser Ile Arg Tyr Asp Leu Phe
1 5

<210> 4557
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4557
Met Phe Ile Thr Pro Leu Ser Trp Ser Leu Leu Ile Trp Val Leu Leu
1 5 10 15

Gly Phe Leu Leu Leu Phe Leu Asn Tyr Ser Arg Leu Leu Tyr Ile Leu
20 25 30

Asp Phe

<210> 4558
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4558
His Phe Ser Lys Phe Thr Leu Ser Leu Leu Ala Ser Gly Arg Tyr Ile
1 5 10 15

Tyr Ser His Met Val Phe Thr Phe Phe Ser Ile Val Leu Glu Ala Leu
20 25 30

Ile Met Leu Val Glu Gln Leu Thr Ser Arg Val Phe Phe Pro Ala Cys
35 40 45

His Thr Cys
50

<210> 4559
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4559
Met Phe Ser Ile Phe Phe Phe Met Lys Thr Leu Phe Phe Pro Leu Ile
1 5 10 15

Lys His Ile Leu Leu Trp Cys Leu Phe Phe Leu Leu Ala Val
20 25 30

<210> 4560
<211> 108
<212> PRT
<213> Homo sapiens

<400> 4560
Ile Thr Tyr Gln Asp Val Gly Cys Pro Gly Val Leu Pro Asp Ser Ser
1 5 10 15

Leu Leu Val Pro Ile Pro Asn Val Leu Leu Ser Phe Phe Ala Phe His

```
            20                  25                  30

Asn Ile Lys Glu Thr Thr Thr Leu Leu Pro Asn Ser Ile Leu Cys Leu
        35                  40                  45

Leu Phe His Ile Lys Trp Glu Leu Cys Leu Leu Arg Ser Ala Pro Pro
    50                  55                  60

Ile Asn Tyr Met Cys Pro Arg Ile Ile Gln Ala Arg Asp Thr Arg Trp
65                  70                  75                  80

Glu Asn Ile Ser Lys Lys Lys Ser Pro Leu Lys Ala Ser Asn Leu Ser
                85                  90                  95

Glu Lys Val Phe Tyr His Thr Leu Thr Pro Tyr Ile
            100                 105
```

4562.5.5.3.0.4.5.3.0.5.4.5.3.0.5.4.5.3.0.5

```
Asn Gly Val Val His Asp Val Val Leu Val Leu Ile Leu Gly Ala Cys
 1               5                  10                  15

Ile Val Val His Ala Val Thr Val Thr Ser Leu Gly Asn Leu Phe Gly
            20                  25                  30

Gly Ala Gly Gln Thr Gln Gln Ser Trp Val Glu Val Leu Asp Val Ala
        35                  40                  45

Gly His Gly Phe Asn Val Val Pro Leu Gly Val His Ser Asp Glu Asp
    50                  55                  60

Arg Leu His Trp Arg Gln Thr Arg Leu Cys Phe Gln Leu Pro His His
65                  70                  75                  80

Leu His Gln Leu Leu Gln Leu Val Trp Ala Asp Val Arg Ala Val Ser
                85                  90                  95

Glu Ala Lys Val His Gln His Pro Leu Ala Pro Glu Val Ser Leu Ala
            100                 105                 110

Ala Ser Pro Ala Ser Val Ile Gln Gln Val Glu Val Ala Leu Ala His
        115                 120                 125

Ser Cys Leu Ala Gln Gly Phe Cys Ser Leu Leu Leu Leu Gln Pro Leu
    130                 135                 140

Leu Leu Ser Pro Gln Gly Gln Pro Gly Pro Thr Glu Ser Ser Pro Glu
145                 150                 155                 160

Gln Ala Cys Asp Gln Gln Pro Gly Ser Lys Pro Arg Ala Leu Gly Leu
                165                 170                 175

Ala Leu Pro Thr Cys Leu Cys Arg Ala Leu Pro
            180                 185
```

<210> 4565
<211> 71
<212> PRT
<213> Homo sapiens

<400> 4565

```
Gly Arg Leu Ile Trp Gly Ala Leu Trp Pro Val Pro Asp Cys Gly Cys
 1               5                  10                  15

Thr Ala Pro Glu Gly Gln Asp Gln Pro Pro Ser Leu Val Cys Cys His
            20                  25                  30

Gly Cys Arg Pro Gly Ser His Ala Glu Val Trp Gln Gly Cys Ser Arg
        35                  40                  45

Gly Gln Asp Tyr Ala Gly Phe Ser Val Gly Ser Gly Ala Gly Ala Pro
    50                  55                  60

Ser Leu Glu Glu Pro Arg Ser
65                  70
```

<210> 4566
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4566
Met Pro Ser Arg Thr Pro Pro Ser Ser Leu Leu Trp Leu Gly Trp Thr
1 5 10 15

Trp Ala Thr Thr Trp Met Trp Leu Pro Cys Pro Ser Pro Cys Trp Ser
20 25 30

Ala Cys Ala Gly Gly
35

<210> 4567
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4567
Met Pro Val Val Ser Val His Arg Pro Val Thr Val Ser Thr Cys Val
1 5 10 15

Pro Ser Pro Gly His Pro Val Lys Arg Ala His Phe Leu Gln Ser Gly
20 25 30

Ile

<210> 4568
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4568
Met Phe Phe Arg Leu Leu Thr Tyr Leu Leu Phe Leu Leu Pro Thr Ser
1 5 10 15

Ala Asp Asn Ser
20

<210> 4569
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4569
Met Trp Leu Ile Leu Leu Ala Ile Pro Gly Val Ala Ala His Ala Trp
1 5 10 15

Leu Val Trp Val His Arg Gly Ser His Gly Trp Ala Gln Gln Arg Gly
20 25 30

Pro Ser Gly Glu Gly Phe

35

<210> 4570
<211> 63
<212> PRT
<213> Homo sapiens

<400> 4570
Met Cys Phe Tyr His His Arg Glu Thr Ala Phe Lys Ser Thr Tyr Leu
1 5 10 15

Tyr Gly Thr Ala Val Thr Arg His Ile His Pro Ser Arg Thr Asp Ala
20 25 30

Cys Asp Pro Glu Ala Arg Arg Ser Phe Val Leu Gly Asp Val His Ile
35 40 45

Gly Ile Tyr Leu Thr Ala Lys Glu Pro Phe Ile Tyr Ile Tyr Ile
50 55 60

<210> 4571
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4571
Met Arg Leu Leu Thr Ser Gly Trp Leu Leu Trp Ala Arg Thr Gly Pro
1 5 10 15

Ser Trp Gly Ala Arg Ser Arg Ile Ser Leu Ile Trp Arg Cys Met Ala
20 25 30

Cys Cys Val
35

<210> 4572
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4572
Val Leu Ala Ala Phe Val Leu Gly Ala Ala Leu Ala Ala Gly Leu Gly
1 5 10 15

Leu Val Cys Ala His Ser Ala Pro His Ala Pro Gly Pro Pro Ala Arg
20 25 30

Ala Ser Pro Ser Gly Pro Gln Pro Arg Arg Ser Gln
35 40

<210> 4573
<211> 65
<212> PRT

<213> Homo sapiens

<400> 4573
Leu Pro Ala Gly Thr Trp Gln Pro Gly Arg Gly Ala Gly Ala Val Gly
1 5 10 15

Ala Ala Gly Gly Val Asp Ser Ser Ser Glu Gly Arg Thr Arg Leu Ala
20 25 30

Gly Gly Glu Asp Gly Val Pro Ala Ala Gln Ser Pro Gln Gly Ser Pro
35 40 45

Leu Arg Ala Thr Lys Gln Asp Arg Ala Ala Leu Val Pro Gly Pro Ser
50 55 60

Gly
65

<210> 4574
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4574
Met Asn Thr Tyr Leu Arg
1 5

<210> 4575
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4575
Met Val Leu Ala Lys Ala Gln Leu Leu Ile Phe Trp Leu Val Ile Leu
1 5 10 15

Asn Gln Leu Gln Ala Arg Tyr Phe
20

<210> 4576
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4576
Met Phe Leu Asn Leu Lys Phe Leu Leu Leu Leu His Phe Cys Glu Ser
1 5 10 15

His Leu Lys Phe Phe Arg Glu Gly Ile Leu Ser Phe Val Gln Arg Cys
20 25 30

Leu Tyr Phe Tyr
35

<210> 4577
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4577
Met Asp Phe Gln Pro Phe Phe Pro Ile Cys Ser Cys Phe
1 5 10

<210> 4578
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4578
Met Ser Thr Pro Ser Val Leu Leu Phe Tyr Ser Ser Phe Leu Leu Ile
1 5 10 15

Phe Ile Leu Trp Asp Glu Arg Leu Gly Ser Ile Glu Lys Asn Ile Asn
20 25 30

His Gln Phe Val Thr Tyr Pro
35

<210> 4579
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4579
Met Leu His Pro Gly Leu Cys Cys Gln Ala His Phe Phe Leu His Leu
1 5 10 15

Pro Pro Leu Thr Ser Ala Ala Pro Ser Cys Met Pro Gln Phe Phe Leu
20 25 30

Lys Ser Leu Asp Ala Phe Ser
35

<210> 4580
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4580
Gln Pro Leu Val Ser Phe Leu Trp Leu Ile Leu Ser Leu Ser Ser Thr
1 5 10 15

Leu Arg Arg Gln Asn Gly Glu Thr Lys Lys Ala Thr Leu Lys Val Phe
20 25 30

Ile Leu Ser Gly Tyr Leu Ala Phe Phe
35 40

<210> 4581
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4581
Phe Leu Lys Ala Leu Gln Val Ile Phe Phe Leu Leu Phe Lys Asn Tyr
1 5 10 15

Asn Phe Tyr Phe Leu Tyr Cys Ser Phe Lys Thr Ser Cys Tyr Ser Ile
20 25 30

Cys Arg

<210> 4582
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4582
Met Leu Ser Ile Asp Leu Leu Leu Phe Ser Leu Leu Phe Leu Leu Leu
1 5 10 15

Cys Gly Tyr Phe Leu Leu Ile Xaa Arg Ile Leu Leu Val Asn Met Leu
20 25 30

His Ile His Ile Ile Trp Cys Pro Val Phe Pro Phe Thr Tyr Tyr Thr
35 40 45

Phe His Ile Ser Thr Leu Ser Asp Ile Ser Ala
50 55

<210> 4583
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4583
Met Phe Ser His Pro Pro Pro Gln Pro Leu Leu Asn
1 5 10

<210> 4584
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4584

```
Met Phe Ile Met Ala Phe Ile Leu Leu Ile Ser Phe Tyr Met Leu Ile
  1               5                  10                  15

Leu Ile Ser Ser Ser Met Ser Lys
             20
```

<210> 4585
<211> 130
<212> PRT
<213> Homo sapiens

<400> 4585

```
Met Tyr Gln Thr Pro Met Glu Val Ala Val Tyr Gln Leu His Asn Phe
  1               5                  10                  15

Ser Ile Ser Phe Phe Ser Ser Leu Leu Gly Gly Asp Val Val Ser Val
             20                  25                  30

Lys Leu Asp Asn Ser Ala Ser Gly Ala Ser Val Val Ala Ile Asp Asn
         35                  40                  45

Lys Ile Glu Gln Ala Met Asp Leu Val Lys Asn His Leu Met Tyr Ala
     50                  55                  60

Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile Arg Glu Leu Val
 65                  70                  75                  80

Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu Leu Lys Thr Leu
                 85                  90                  95

Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys Leu Ser Pro Glu
            100                 105                 110

Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala Pro Gly Gly Ser
        115                 120                 125

Ala Val
    130
```

<210> 4586
<211> 130
<212> PRT
<213> Homo sapiens

<400> 4586

```
Met Tyr Gln Thr Pro Met Glu Val Ala Val Tyr Gln Leu His Asn Phe
  1               5                  10                  15

Ser Ile Ser Phe Phe Ser Ser Leu Leu Gly Gly Asp Val Val Ser Val
             20                  25                  30

Lys Leu Asp Asn Ser Ala Ser Gly Ala Ser Val Val Ala Ile Asp Asn
         35                  40                  45

Lys Ile Glu Gln Ala Met Asp Leu Val Lys Asn His Leu Met Tyr Ala
     50                  55                  60
```

Val Arg Glu Glu Val Glu Ile Leu Lys Glu Gln Ile Arg Glu Leu Val
65 70 75 80

Glu Lys Asn Ser Gln Leu Glu Arg Glu Asn Thr Leu Leu Lys Thr Leu
85 90 95

Ala Ser Pro Glu Gln Leu Glu Lys Phe Gln Ser Cys Leu Ser Pro Glu
100 105 110

Glu Pro Ala Pro Glu Ser Pro Gln Val Pro Glu Ala Pro Gly Gly Ser
115 120 125

Ala Val
130

<210> 4587
<211> 97
<212> PRT
<213> Homo sapiens

<400> 4587
Glu Phe Gly Phe Phe Phe Ser Leu Phe Leu Val Ile Ser Leu Phe Val
1 5 10 15

Trp Lys Glu Ser Tyr Phe Ser Leu Asp Ile Thr Pro Glu Phe Pro Ser
20 25 30

Asp Ala Leu Leu Arg Val Arg Ala Val Ala Asp Ser Leu Lys Phe Ser
35 40 45

Ser Ala Leu Pro Tyr Leu Pro Phe Ile Leu Gly Ile Gly Lys Cys Cys
50 55 60

Lys Gly Pro Asp Gly Lys Tyr Phe Arg Leu Tyr Gly Leu Val Ser Val
65 70 75 80

Ala Asn Ile Gln Leu Cys Gln Cys Thr Leu Lys Ala Ala Ile Asp Asn
85 90 95

Met

<210> 4588
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4588
Met Val Cys Cys Val Val Phe Phe Phe Phe Trp Lys Glu Ser Leu Leu
1 5 10 15

Phe Ile Arg Phe Leu Lys Asp Ser Lys Thr Lys Lys Gly Leu
20 25 30

<210> 4589

<211> 36
<212> PRT
<213> Homo sapiens

<400> 4589
Met Arg Leu Lys Leu Leu Glu Tyr Arg Thr Ile Leu Leu Ile Val Phe
1 5 10 15

Leu His Ser Phe Ser Ala Trp Gln Arg Asp Gly Arg Gly Pro Asp Thr
20 25 30

Asp Tyr Leu Gly
35

<210> 4590
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4590
Met Ile His Leu Lys Ser Val Thr Ser Leu Met Leu Leu Ala Ile Asn
1 5 10 15

Leu Gly Asn Met Lys Gln Ser Cys Ser
20 25

<210> 4591
<211> 59
<212> PRT
<213> Homo sapiens

<400> 4591
Glu Ile Leu Leu Leu Ser Phe Leu Phe Ile Tyr Leu Arg Phe Ser Leu
1 5 10 15

Ser Phe Ser Ser Asp Leu Ser Pro Ser Ile Cys Leu Ser Ser Phe Ile
20 25 30

Phe Leu Ser Ser Pro Phe Leu Pro Ala Ser Ala Thr Ser Leu Val Ser
35 40 45

Trp Leu Leu Thr Phe Leu Arg His Arg Leu Leu
50 55

<210> 4592
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4592
Met Leu Leu Arg Asp Ile Glu Val Tyr Phe Leu Gly Gln Val Gly Ile
1 5 10 15

Phe Tyr Pro Cys Ser Phe Phe Ile Leu Ala Thr His Ile Cys Ser Leu
20 25 30

Ala His Pro Thr Ala Pro Pro Thr Arg Pro Arg Trp Ile Leu Pro Gln
35 40 45

Cys

<210> 4593
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4593
Met Pro Thr Ser Gln Lys Gln Met Pro Leu Phe Leu Cys Gln Asn Leu
1 5 10 15

Met Val Leu Trp Leu Leu Leu Asn Pro Val Asn Leu Glu Pro Ile
20 25 30

<210> 4594
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4594
Met His His Gln Ala Gly His Phe Lys Leu Ser Ser Arg Asn Glu Phe
1 5 10 15

Leu Cys Phe Leu Ala Leu Leu Phe Ala Trp Gly Trp Glu Arg Val Val
20 25 30

Ser Ser Asn Cys
35

<210> 4595
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4595
Met Pro Ser Leu Leu His Ile Ile Val Arg Pro Phe Leu Leu Leu Trp
1 5 10 15

Ser Pro Thr Ile Ser Phe Val Leu Tyr Pro Gly Glu Arg Gly Arg Val
20 25 30

Asn Gly Thr Gly Trp Phe Leu
35

<210> 4596
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4596
Met Trp Arg Trp
1

<210> 4597
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4597
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu
1 5 10 15

Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala
20 25 30

Ser Lys Ala
35

<210> 4598
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4598
Met Glu Ser Ala Glu Val Leu Ala Leu Pro Gly Lys Ile Leu Ser Leu
1 5 10 15

Tyr Val Ile Val Leu Ser Ser Leu Phe Leu Leu Asn Ser Ile Pro Phe
20 25 30

Leu Val Leu Glu Pro Lys Ala Ile Glu Tyr Ala Lys Lys Lys Lys Lys
35 40 45

Gly Gly Arg
50

<210> 4599
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4599
Met Phe Leu Leu Ser Leu Leu Leu Lys Met Ile His Phe Ile Ala Asn
1 5 10 15

Ser Phe Leu Ser Ser Ile Ser Ser Phe Leu Ser Val Cys His Ser Asp
20 25 30

Leu Cys Tyr Xaa Ser Tyr Leu Val Ala Ile Leu Lys Val Phe Lys Met
35 40 45

<210> 4600
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4600
Met Leu Arg Thr Asp Leu Ile Lys Leu Ser Trp Tyr Leu Arg His Phe
1 5 10 15

Leu Lys Gly Cys Ile
20

<210> 4601
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4601
Met Ile Lys Ala Val Leu Thr Phe Leu Lys Ile His Cys Leu Gly Trp
1 5 10 15

Ala Gly Asn Ser Phe Glu Val Thr Leu Ile Arg Leu Gln Cys
20 25 30

<210> 4602
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4602
Met Ser Ile Ile Pro Cys Arg Pro Gln Pro Arg Ala Gly Arg Cys Tyr
1 5 10 15

Ser Leu Cys Phe Met Leu Leu Leu Trp Pro Leu Phe Leu Pro Ser Ser
20 25 30

Glu Leu Cys Arg Val Tyr Cys Arg Gln Ser Glu Val Ser Phe
35 40 45

<210> 4603
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4603
Cys Thr Thr Val Val Leu Phe Leu Leu Ile Glu Leu Lys Gln Leu Tyr
1 5 10 15

Gly Ala Lys Val Thr Gly Tyr Ser
20

<210> 4604
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4604
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser
1 5 10 15

Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met
20 25 30

His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile
35 40 45

<210> 4605
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4605
Phe Asn Phe Asp Val Ile Leu Leu Leu Val Ile Phe Ala Phe Val Ser
1 5 10 15

Cys Thr Phe Val Ser Tyr Pro Ile Met Cys Ile Ile Tyr Ile Tyr Met
20 25 30

His Ile His Thr His Ile Tyr Ile Tyr Asn Arg Tyr Ile
35 40 45

<210> 4606
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4606
Met Ala Arg Ala Asp Trp Val Leu Ser Leu Leu Leu Tyr Asn His Ile
1 5 10 15

Thr Ala Leu Pro Cys Ile Phe Ser Ser Lys Asn Gly Asp Tyr Leu Leu
20 25 30

Cys Gly Ser Val Cys Arg
35

<210> 4607
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4607
Met Met Val Met Tyr Arg Trp Val Phe Gly Val Asp Val Leu Ser Val
1 5 10 15

Cys

<210> 4608
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4608
Met Val Leu Val Ser Ile Phe Cys Leu Phe Ala Cys Phe Gln Asn Ser
1 5 10 15

Leu Ala Trp Tyr Cys Met Glu Ser Ser Ser Phe Ser Ser Cys Pro Leu
20 25 30

Arg Ala Gly Leu Phe Pro Val Ser Ser Gln Arg Pro
35 40

<210> 4609
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4609
Glu Leu Gly Phe Leu Tyr Cys Phe Leu Cys Asn Met Ile Ala Glu Thr
1 5 10 15

His Phe Lys Asn Ser Glu Ala Cys His Ser Cys
20 25

<210> 4610
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4610
Met Gln Ala Leu Gln Thr Ala Cys Phe Phe Phe Leu Leu Leu Ala Gln
1 5 10 15

Pro Phe Gln

<210> 4611
<211> 41
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4611
Met Ile Leu Leu Ser Val Ser Leu Gly Arg His Trp Ala Phe Thr Tyr
1 5 10 15

Lys Phe Phe Leu Thr Pro Val Val Phe Val Phe Phe Phe Phe Xaa Phe
20 25 30

Phe His Arg Lys Glu Tyr Ile Asn Leu
35 40

<210> 4612
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4612
Met Ser Gly Pro Leu His Gly His His Ser Leu Leu Arg Leu Leu Ala
1 5 10 15

Ala Cys Thr Leu Ile Leu Pro His Ser Leu Ala Ala Ser Val Asn Val
20 25 30

Lys Asn

<210> 4613
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4613
Met Cys Val Ser Val Leu Ser Ile Phe Val Pro Gln Leu His Cys Leu
1 5 10 15

Asn Tyr Ser Ser Phe Val Ser Leu Ser Ile
20 25

<210> 4614
<211> 137
<212> PRT
<213> Homo sapiens

<400> 4614
Met Val His Leu Thr Thr Leu Leu Cys Lys Ala His Arg Gly Gly His
1 5 10 15

Leu Thr Ile Arg Leu Ala Leu Gly Gly Cys Thr Asn Arg Pro Phe Tyr
20 25 30

Arg Ile Val Ala Ala His Asn Lys Cys Pro Arg Asp Gly Arg Phe Val
35 40 45

Glu Gln Leu Gly Ser Tyr Asp Pro Leu Pro Asn Ser His Gly Glu Lys
50 55 60

Leu Val Ala Leu Asn Leu Asp Arg Ile Arg His Trp Ile Gly Cys Gly
65 70 75 80

Ala His Leu Ser Lys Pro Met Glu Lys Leu Leu Gly Leu Ala Gly Phe
85 90 95

Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
100 105 110

Lys Arg Ala Arg Glu Val Leu Leu Ala Ser Gln Lys Thr Asp Ala Glu
115 120 125

Ala Thr Asp Thr Glu Ala Thr Glu Thr
130 135

<210> 4615
<211> 106
<212> PRT
<213> Homo sapiens

<400> 4615
Met Ala Val Thr Ala Leu Ala Ala Arg Thr Trp Leu Gly Val Trp Gly
1 5 10 15

Val Arg Thr Met Gln Ala Arg Gly Phe Gly Ser Asp Gln Ser Glu Asn
20 25 30

Val Asp Arg Gly Ala Gly Ser Ile Arg Glu Ala Gly Gly Ala Phe Gly
35 40 45

Lys Arg Glu Gln Ala Glu Glu Glu Arg Tyr Phe Arg Ala Gln Ser Arg
50 55 60

Glu Gln Leu Ala Ala Leu Lys Lys His His Glu Glu Glu Ile Val His
65 70 75 80

His Lys Lys Glu Ile Glu Arg Leu Gln Lys Glu Ile Glu Arg His Lys
85 90 95

Gln Lys Ile Lys Met Leu Lys His Asp Asp
100 105

<210> 4616
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4616
Met Cys His Gly Gly Leu Val His Leu Ser Thr His His Leu Ser Phe
1 5 10 15

Lys Leu Cys Met Gln
20

<210> 4617
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4617
Met Val Leu Leu Ser Pro Ala Met Ser Leu Leu Ile Phe Cys Leu Pro
1 5 10 15

Ala Leu Ser Ile Ser Lys Asn Lys Lys Lys Lys Lys Lys Lys Glu Phe
20 25 30

Lys Lys Leu Leu Xaa
35

<210> 4618
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4618
Met Trp Leu Thr Val Ser Trp Leu His Thr Phe His Ala Leu Asp Phe
1 5 10 15

Cys Ala Phe Cys Arg Asn Asp Ser Arg
20 25

<210> 4619
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4619
Met Gly Thr Gln Leu Leu Phe Leu Leu Cys Ser Ile Leu Ile Pro Leu
1 5 10 15

Cys Val Glu Leu Asp Tyr Ile Phe Leu Lys Gln Ser Ser Leu Asn Asn
20 25 30

Leu Val Val
35

<210> 4620
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4620
Met Val Glu Trp Thr Leu Ala Val Leu Val Cys His Leu Phe Leu Ile
1 5 10 15

Leu Tyr Leu Phe Leu Phe Cys Glu Asn Cys Leu Val Val Ser Cys
20 25 30

<210> 4621
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4621
Met His Phe Phe Leu Pro Lys Gln Val Ser Phe Pro Leu Ser Leu Ile
1 5 10 15

Thr Leu Leu Trp Pro Ser Leu Ile Leu Gln Lys Ile Ser Arg Leu
20 25 30

<210> 4622
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4622
Met Thr Cys Ser Arg Ser Ser Ile Phe Leu Thr Leu Leu Leu Leu Gly
1 5 10 15

His Arg Ala Ile Phe Ser Asn Met Pro Glu Lys Leu Arg Ser Leu Ile
20 25 30

Thr Asp Asn Leu Gln Leu Phe Thr Ser Lys Ser Phe Gly Gln Ile Met
35 40 45

Pro Val Lys Glu Cys Lys Phe Tyr Lys
50 55

<210> 4623
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4623
Met Leu Leu Ala Pro Ala Val Gly Gln Leu Leu Tyr Ile Tyr Trp Thr
1 5 10 15

Leu Tyr Phe Ser Arg Ser Phe Leu Arg Trp Val Gly Phe Val Ser Thr
20 25 30

Leu Gln Val Arg Lys Val Lys Leu Arg Glu Leu Lys
35 40

<210> 4624

<211> 14
<212> PRT
<213> Homo sapiens

<400> 4624
Val Leu Tyr Tyr Pro Tyr Leu Ala Ile Tyr Asn Met Lys Val
1 5 10

<210> 4625
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4625
Met Val Met His Thr Arg Leu Leu Phe Arg Met Ser Leu Trp Pro Val
1 5 10 15

Asn Cys Gly Gln Glu Thr Tyr Cys Lys Lys Lys Lys Lys Lys Lys
20 25 30

<210> 4626
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4626
Met Arg Leu Leu Leu Ile Trp Gln Ala Phe Leu Cys Pro Lys Leu Thr
1 5 10 15

Lys Ser Ser Gln Ser Phe Leu Phe Leu Ala Tyr Pro Ile Ser Leu
20 25 30

<210> 4627
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4627
Met Asn Cys Gly Thr Arg Gly Cys Glu Asn Leu Arg Trp Asn Leu Ser
1 5 10 15

Phe Phe Leu Ser Phe Phe Leu Asn Phe Val Phe Ser Ile Gln Gln Gln
20 25 30

Cys Val Glu Arg Ile Leu Cys Arg Cys Arg
35 40

<210> 4628
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4628

Leu Pro Ser Ser Val Arg His Gly Leu Ala Gln Val Leu Ala Leu Val
1 5 10 15

Thr Phe Gln His Val Thr Leu Gly Thr Cys Asp Leu His Leu Ser Gly
20 25 30

Phe Val Ser Ser Leu Leu Arg Cys Arg Gln Cys Thr Tyr Asn Ile Cys
35 40 45

Tyr Phe Arg Ala Met Arg Cys Thr Ser
50 55

<210> 4629
<211> 66
<212> PRT
<213> Homo sapiens

<400> 4629
Met Gly Pro Arg Leu Cys Pro Val Leu Gly Ser Ala Cys Pro Ala Ser
1 5 10 15

Thr Leu Cys Trp Leu Leu Leu Ala Ser Tyr Trp Val Leu Pro Cys Arg
20 25 30

Asp Lys His Thr Gly Pro Glu Lys Leu Gly Arg His Glu Gln Val Ala
35 40 45

Gly Pro Ser Trp Thr Ser Phe Val Ser Asp Pro Thr Ile Ile Gln Gly
50 55 60

Pro Ile
65

<210> 4630
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4630
Met Ile Trp Ser Leu Ala Thr Leu Leu Ser Ser Leu Leu Leu Asn Met
1 5 10 15

Ser Arg Ala Phe Pro Ser Gln Trp Ala Phe Val Leu Thr Ile Ser Ser
20 25 30

Ala Trp Met Phe Leu Leu
35

<210> 4631
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4631
Met Val Thr Asn Tyr Arg Ser Gln Leu Ser Phe Leu Gln Ser Leu Pro

1 5 10 15

Gln Phe Tyr Thr Phe Cys
20

<210> 4632
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4632
Met Ser Ile Lys Cys Leu His Lys Thr Leu Gln Val Leu Tyr Phe Met
1 5 10 15

Arg Phe Leu Leu Leu Ile Lys Ala Thr Lys Met Asn Gly Lys Phe Ile
20 25 30

Leu Ile Lys Ser Thr Thr Trp Glu Glu Val Arg
35 40

<210> 4633
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4633
Met Ala Glu Thr Pro Ser Leu Ser His Glu Gly Leu Ile Gly Ile Lys
1 5 10 15

Leu Gly Phe Leu Trp Leu Trp Val Leu Phe Phe Cys Cys Cys Phe Trp
20 25 30

Phe Ser Val Cys Phe Leu Val Tyr Gly Gly
35 40

<210> 4634
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4634
Met Ser Glu Asn Pro Leu Leu Ala Lys Ser Pro Glu Ser Lys Phe Cys
1 5 10 15

Phe

<210> 4635
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4635

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Ala Phe Leu Ala Ala Ala Leu Ala Gln Gly Leu Cys Glu Val Leu Leu
  1               5                  10                  15

Val Val Thr Lys Glu Val Glu Glu Lys Gly Ser Trp Leu Arg Thr Asp
             20                  25                  30
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<210> 4636
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4636
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Gly Lys Cys Leu Ile Asn Leu Val Ile Gly Trp Val Lys Tyr Met Gly
  1               5                  10                  15

Glu Phe Tyr Met
             20
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<210> 4637
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4637
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Asp Thr Trp Phe Val Ser Thr Phe Trp Leu Leu Leu Thr Val Leu Leu
  1               5                  10                  15

Cys Thr Phe Leu Ser Lys Ser Leu Phe Gly Asn Leu Phe Ser Asn Ser
             20                  25                  30

Leu Lys Tyr Leu Gly Met Glu Leu Leu Ser Phe Met Ile Ile Gln Ser
         35                  40                  45

Leu Pro Ser Arg Gly Thr Pro Ala Thr Val Leu Phe Tyr Ile Leu Ile
     50                  55                  60

Ser Ser Val
 65
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<210> 4638
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4638
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Met Gln Phe Thr Asp Ser Arg Gln Cys Cys Leu Leu Phe Thr Leu Ile
  1               5                  10                  15

Leu Phe Thr Val Leu Ser Gln Phe Tyr Phe Leu Glu Glu Trp Tyr Ser
             20                  25                  30

Val Leu
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<210> 4639
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4639
Met Val Thr Ile Ile Ile Leu Gln Pro Ser Ser Phe Pro Leu Pro Leu
1 5 10 15

Arg Leu Asn Cys Tyr Asn Ala Asp Tyr Leu Tyr Ser Ser
20 25

<210> 4640
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4640
Thr Val Trp
1

<210> 4641
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4641
Met Ser Gln Cys Tyr Arg Asp Phe Val Tyr Gly Gln Phe Trp Gly Gln
1 5 10 15

Phe Met Ala Arg Phe Trp Gly Ala Cys Ser Gln His Gln Glu Met Cys
20 25 30

<210> 4642
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4642
Met Phe Ser
1

<210> 4643
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4643
Met Thr Tyr Arg Leu Ile Val Ile Phe Ser Phe Leu Leu Leu Leu Phe
1 5 10 15

Arg Leu Asp Leu Gly Lys Ser Pro Gly Trp Leu Glu Gly Leu Arg Phe
20 25 30

Met Trp Ser Phe Val Phe
35

<210> 4644
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4644
Met Ser Ser Val Asp Phe His Val Leu Ser Ser Pro Phe Asp Ile Arg
1 5 10 15

Gly Leu Lys Thr Pro Pro Leu Asp His Ala Asn Thr Ala Ile Phe Cys
20 25 30

Ala Trp Val Pro
35

<210> 4645
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4645
Met Cys Ile Leu Ile Pro Phe Ala Ser Val Leu Leu Arg Ile Phe Ala
1 5 10 15

Ser Gly Ile Leu Val Cys Ser Phe Leu Val Ser Leu Ser Gly Phe Gly
20 25 30

Val Arg Glu Met Gln Ala Ser
35

<210> 4646
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4646
Met Ile Ile Ile Ala Lys Val Val Leu Phe Phe Asn Ser Ser Ala Ser
1 5 10 15

<210> 4647
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4647
Met Tyr Leu Arg Ile Lys Tyr Val Ser Lys Leu Pro Gly Leu Leu Leu
1 5 10 15

Xaa Phe Phe Phe Val Leu Phe Leu Arg Leu Trp Tyr Ser Trp Glu Met
20 25 30

Gln Ile Gly
35

<210> 4648
<211> 7
<212> PRT
<213> Homo sapiens

<400> 4648
Asn Phe Leu Phe Phe Leu Cys
1 5

<210> 4649
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4649
Met Leu Thr Tyr Thr Ile Met Phe Ser Leu Ile Val Glu Val Ile Ser
1 5 10 15

Gly Gly Leu Ser Phe Ile
20

<210> 4650
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4650
Met Gln Lys Ser Lys Gln Pro Arg Ile Leu Cys Leu Ile Leu Leu Val
1 5 10 15

Ile Pro Thr Leu Leu Gln Gln Tyr Ser Cys Thr Cys His Ile Lys
20 25 30

<210> 4651
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4651
Phe Leu Phe Val Pro Asn Val Phe Ser Ser Phe Lys Asn Gly Ser His
1 5 10 15

Pro Thr Arg Leu Pro Pro Tyr Gln Asp
20 25

<210> 4652
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4652
Met Lys Leu Val Ile Met Tyr Xaa Ile Leu Leu Ala Val Ser Ser Leu
1 5 10 15

Thr Val Ile Lys Val Ile
20

<210> 4653
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4653
Met Arg Ile Leu His Phe Gln Leu Thr Cys Cys Tyr Ile Pro Thr Ile
1 5 10 15

Ile Arg Pro Trp Arg Pro Val Ala Trp Phe Pro Leu Ser Leu Leu Cys
20 25 30

Phe Phe Leu Trp His Gly
35

<210> 4654
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4654
Met Cys Met His Thr Ser Ser Leu Leu Phe Leu Leu Val Leu Leu Ser
1 5 10 15

Asp Thr Tyr Glu Lys Asp His Phe Pro Ser Leu Phe Pro Phe Val Gly
20 25 30

<210> 4655
<211> 3
<212> PRT
<213> Homo sapiens

<400> 4655
Gly Val Thr
1

<210> 4656
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4656
Met Thr Lys Glu Asp Ser Lys Leu
1 5

<210> 4657
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4657
Met Ala Val Gly Thr Phe Gly Val Trp Leu Trp Gly Asn
1 5 10

<210> 4658
<211> 49
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4658
Met Ala Phe Phe His Leu Leu Lys Gly Thr Gly Leu Phe Pro Pro Ser
1 5 10 15

Leu Ser Ser Ser Val Leu Cys Phe Val Xaa Asp Leu Phe Xaa Trp Thr
20 25 30

Ile His Arg Ser Ala Leu Leu Phe Leu Leu Pro Leu Ser Val Phe Ser
35 40 45

Cys

<210> 4659
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4659
Ile Lys Ile Val Leu Leu Phe Ser Cys Leu Phe Leu Phe Leu Leu Phe
1 5 10 15

Val Phe Leu Thr Ser Leu Tyr Trp Glu Val Thr Pro Val
20 25

<210> 4660
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4660
Met Cys Leu Tyr Gln Phe Ile Phe Leu Phe Tyr Trp Leu Val Val Phe
1 5 10 15

Tyr Leu Glu Cys Thr Thr Val Tyr Pro Phe Thr Ser
20 25

<210> 4661
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4661
Phe Leu Ser Ser Leu Ser
1 5

<210> 4662
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4662
Met Glu Phe Leu His Asp Val Gly Val Asp Ala Ile Ala Phe Ser Leu
1 5 10 15

Leu Val Phe Leu Leu Thr Val Arg Pro Leu Cys Cys Arg Ser Ala Gly
20 25 30

Val Cys Cys Gly Ser Thr Pro Asp Pro Val Ser Leu Ser Ile Thr Ser
35 40 45

Gly Gly Cys Arg Thr Ala Lys Thr Asp
50 55

<210> 4663
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4663
Met Gly Phe Tyr Leu Arg Val Leu Arg Leu Val Tyr Val Phe Gln Glu
1 5 10 15

Leu Leu Gly His Cys Gly Ser Ala Ala Pro Gly Thr Ser Cys Ala
20 25 30

<210> 4664
<211> 69
<212> PRT
<213> Homo sapiens

<400> 4664
Met Gly Arg Trp Pro Gly Thr Ala Gly Ser Leu Thr Leu Thr Trp Leu
1 5 10 15

Arg Val Glu Ile Trp Leu Val Pro Trp Ser Gly Thr Cys His Ser Pro
20 25 30

Asn Pro Lys Gln Ser Arg Val Trp Ala Gln Asp Cys Pro Leu Pro Phe
35 40 45

Glu Thr Pro Ser Leu Val Pro Ala Ser Lys Thr Asn Arg Glu Ala Thr
50 55 60

Leu Val Ala Gly Ser
65

<210> 4665
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4665
Met Gln Ile Asn Asp Tyr Phe Leu Ser
1 5

<210> 4666
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4666
Gly Gly Ile Tyr Lys Phe Thr Leu Thr Val Cys Ala Ala His Ile Arg

1 5 10 15

Phe Leu Val Leu Gly Leu Phe Leu Tyr Ser Leu His Gly Asp Trp Gln
20 25 30

His Gln His His Met Ser Thr Thr
35 40

<210> 4667
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4667
Met Ile Glu Asn Pro Gly Arg Leu Phe Leu Ser Ser Val Leu Phe Cys
1 5 10 15

Phe Phe Ala Leu
20

<210> 4668
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4668
Met Leu Leu Leu Leu Phe Leu Phe Trp Ser Lys Gly Ala Ala Glu Gly
1 5 10 15

Glu Pro Gly Pro Val Pro Ala Pro Ala Gly Phe Ser Glu Thr Gln Arg
20 25 30

Trp Arg

<210> 4669
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4669
Met Gly Gln Met Leu Leu Ser Val Leu Leu Leu Leu Gln Trp Leu Cys
1 5 10 15

Ser His Ser Ala Ser Asn Leu Ser Ser Phe Ser Ser Val Phe Thr His
20 25 30

Leu Gly Arg Trp
35

<210> 4670
<211> 35
<212> PRT

<213> Homo sapiens

<400> 4670
Met Val Cys Leu Leu Leu Arg Thr Leu Cys Pro Leu Cys Ser Arg Gly
1 5 10 15

Lys Thr Gly Leu Glu Val Asn Leu Ser Leu Phe Leu Tyr Ile Glu Gly
20 25 30

Arg Asp Gln
35

<210> 4671
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4671
Met Phe Glu Val Phe His Phe Leu Ala Phe Val Ser Asn Met Val Trp
1 5 10 15

Ile Cys Gly Ala Ile Gln Ile Ser His Gln Ile Val Ser Leu Asn Val
20 25 30

Val Gly Gly Ala Trp Trp Glu Val Thr Gly Leu Tyr Gly Trp Ile Leu
35 40 45

Met Asn His Leu Ile Pro Leu Pro Leu Val Leu Ser Leu Pro
50 55 60

<210> 4672
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4672
Met Ile Phe Leu Leu Phe Cys Ser Thr Phe Pro Leu Phe Lys Thr Ser
1 5 10 15

Ala Leu Ala Thr Gln Asp Leu Arg Gly Ala Phe Leu Glu Ser Cys Leu
20 25 30

Lys Gln Glu Gln Ile Thr Gln Lys His
35 40

<210> 4673
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4673
Gln His Cys Cys Leu Ser Ser Ala Ser Cys Leu Gly Ser Pro Leu Val
1 5 10 15

Trp Glu Asp Cys Cys Ala Pro

20

<210> 4674
<211> 48
<212> PRT
<213> Homo sapiens

<400> 4674
Met Ile Gln Thr Pro Pro Thr Arg Pro His Leu Leu Thr Leu Gly Trp
1 5 10 15

Ser Thr Cys Phe Leu Val Trp Ser His Glu Ile Arg Thr Gly Ala His
20 25 30

Ile Gln Thr Met Ser His Thr Ile Gln Arg Ile Ile Ala Met Cys Lys
35 40 45

<210> 4675
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4675
Met Glu Trp Leu Val Ser Pro Ser His Phe Leu Phe Leu Thr Tyr Phe
1 5 10 15

Ser Leu Leu Val Ser Leu Asp Gly Glu Val Leu Phe Met Ile Arg Lys
20 25 30

Glu Gly Ile Ser Tyr
35

<210> 4676
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4676
Met Arg Gly Val Glu Phe Cys Leu Val Phe Trp Pro Cys Trp
1 5 10

<210> 4677
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4677
Met Val Gly Ile Trp Val Cys Val Cys His Leu Ser Val Ser Gln Ala
1 5 10 15

Leu Lys Asn Ile Ser Tyr Ser Trp His Ser Ser Val His Phe Gly Lys
20 25 30

<210> 4678
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4678
Met Pro Phe Leu Leu Leu Leu His Ala Ile Glu His Ser Leu Ser Ser
1 5 10 15

His Arg Ile Gln Phe Ser His Leu Arg Lys Ala Phe Pro Asp Ser Asn
20 25 30

Arg Gln Val Met His Leu Phe Pro Val Leu Thr
35 40

<210> 4679
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4679
Met Leu Ser Tyr Lys Thr Ser Ile Phe Cys Leu Phe Leu Phe Phe Pro
1 5 10 15

Pro Phe Leu Thr Arg Gly Glu Lys Lys Thr Glu Gly Lys Lys Gly Gly
20 25 30

Asn Glu Ser
35

<210> 4680
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4680
Met Cys Val Cys Val Cys Met Tyr Met His Val Phe Met Cys Phe Leu
1 5 10 15

Gly Leu Ile Ser Leu Lys
20

<210> 4681
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4681
Met Leu Ala Leu Lys Leu Val Leu Thr Ala Phe Ser Leu Val Gly Cys
1 5 10 15

Leu Leu Glu Ser Pro Ile Gly Thr Ala Arg Ala Ile Thr Ser Leu
20 25 30

<210> 4682
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4682
Met Val Tyr Met Pro Ala Cys Ala Val Val Val Ser Gly Ile Leu Glu
1 5 10 15

Leu Ala Leu Ser Ala Ser Leu Leu
20

<210> 4683
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4683
Met Tyr Cys Leu Cys Pro Phe Leu Leu Pro Ser Ser Asn Pro Leu Tyr
1 5 10 15

Ser Tyr Cys Gly Leu Cys Ser Thr Val Val Tyr Pro Ser Thr Arg
20 25 30

<210> 4684
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4684
Met Asn Ser Met Asn Tyr Leu Phe Ile Phe Leu Val Ser Leu Glu Ala
1 5 10 15

<210> 4685
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4685
Met Val Leu His Leu His Leu Gln Leu Cys Leu Val Ser Val Cys Lys
1 5 10 15

Ser Lys Ser Leu Val Gln Pro Phe Gln Ala Thr Trp Pro Lys Leu Thr

20 25 30

Lys His Pro
35

<210> 4686
<211> 625
<212> PRT
<213> Homo sapiens

<400> 4686
Met Glu Leu Leu Pro Thr His Ala Phe Ser Thr Leu Phe Pro Val Leu
1 5 10 15

Gln Asp Asn Leu Glu Val Tyr Leu Gly Leu Gln Gln Phe Ile Val Thr
20 25 30

Ser Gly Ser Gly His Arg Leu Asn Ile Thr Ala Glu Asn Asp Cys Arg
35 40 45

Arg Leu His Cys Ser Leu Arg Asp Leu Ser Ser Leu Leu Gln Ala Val
50 55 60

Gly Arg Leu Ala Glu Tyr Phe Ile Gly Asp Val Phe Ala Ala Arg Phe
65 70 75 80

Asn Asp Ala Leu Thr Val Val Glu Arg Leu Val Lys Val Thr Leu Tyr
85 90 95

Gly Ser Gln Ile Lys Leu Tyr Asn Ile Glu Thr Ala Val Pro Ser Val
100 105 110

Leu Lys Pro Asp Leu Ile Asp Val His Ala Gln Ser Leu Ala Ala Leu
115 120 125

Gln Ala Tyr Ser His Trp Leu Ala Gln Tyr Cys Ser Glu Val His Arg
130 135 140

Gln Asn Thr Gln Gln Phe Val Thr Leu Ile Ser Thr Thr Met Asp Ala
145 150 155 160

Ile Thr Pro Leu Ile Ser Thr Lys Val Gln Asp Lys Leu Leu Leu Ser
165 170 175

Ala Cys His Leu Leu Val Ser Leu Ala Thr Thr Val Arg Pro Val Phe
180 185 190

Leu Ile Ser Ile Pro Ala Val Gln Lys Val Phe Asn Arg Ile Thr Asp
195 200 205

Ala Ser Ala Leu Arg Leu Val Asp Lys Ala Gln Val Leu Val Cys Arg
210 215 220

Ala Leu Ser Asn Ile Leu Leu Leu Pro Trp Pro Asn Leu Pro Glu Asn
225 230 235 240

Glu Gln Gln Trp Pro Val Arg Ser Ile Asn His Ala Ser Leu Ile Ser
245 250 255

Ala Leu Ser Arg Asp Tyr Arg Asn Leu Lys Pro Ser Ala Val Ala Pro
260 265 270

Gln Arg Lys Met Pro Leu Asp Asp Thr Lys Leu Ile Ile His Gln Thr
275 280 285

Leu Ser Val Leu Glu Asp Ile Val Glu Asn Ile Ser Gly Glu Ser Thr
290 295 300

Lys Ser Arg Gln Ile Cys Tyr Gln Ser Leu Gln Glu Ser Val Gln Val
305 310 315 320

Ser Leu Ala Leu Phe Pro Ala Phe Ile His Gln Ser Asp Val Thr Asp
325 330 335

Glu Met Leu Ser Phe Phe Leu Thr Leu Phe Arg Gly Leu Arg Val Gln
340 345 350

Met Gly Val Pro Phe Thr Glu Gln Ile Ile Gln Thr Phe Leu Asn Met
355 360 365

Phe Thr Arg Glu Gln Leu Ala Glu Ser Ile Leu His Glu Gly Ser Thr
370 375 380

Gly Cys Arg Val Val Glu Lys Phe Leu Lys Ile Leu Gln Val Val Val
385 390 395 400

Gln Glu Pro Gly Gln Val Phe Lys Pro Phe Leu Pro Ser Ile Ile Ala
405 410 415

Leu Cys Met Glu Gln Val Tyr Pro Ile Ile Ala Glu Arg Pro Ser Pro
420 425 430

Asp Val Lys Ala Glu Leu Phe Glu Leu Leu Phe Arg Thr Leu His His
435 440 445

Asn Trp Arg Tyr Phe Phe Lys Ser Thr Val Leu Ala Ser Val Gln Arg
450 455 460

Gly Ile Ala Glu Glu Gln Met Glu Asn Glu Pro Gln Phe Ser Ala Ile
465 470 475 480

Met Gln Ala Phe Gly Gln Ser Phe Leu Gln Pro Asp Ile His Leu Phe
485 490 495

Lys Gln Asn Leu Phe Tyr Leu Glu Thr Leu Asn Thr Lys Gln Lys Leu
500 505 510

Tyr His Lys Lys Ile Phe Arg Thr Ala Met Leu Phe Gln Phe Val Asn
515 520 525

Val Leu Leu Gln Val Leu Val His Lys Ser His Asp Leu Leu Gln Glu
530 535 540

Glu Ile Gly Ile Ala Ile Tyr Asn Met Ala Ser Val Asp Phe Asp Gly
545 550 555 560

Phe Phe Ala Ala Phe Leu Pro Glu Phe Leu Thr Ser Cys Asp Gly Val
565 570 575

Asp Ala Asn Gln Lys Ser Val Leu Gly Arg Asn Phe Lys Met Asp Arg

580 585 590

Asp Leu Pro Ser Phe Thr Gln Asn Val His Arg Leu Val Asn Asp Leu
595 600 605

Arg Tyr Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys
610 615 620

Leu
625

<210> 4687
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4687
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
1 5 10 15

Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
20 25 30

Arg Leu Lys
35

<210> 4688
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4688
Trp Tyr Ser Phe Cys Leu Val Leu Arg Val Ser Lys
1 5 10

<210> 4689
<211> 767
<212> PRT
<213> Homo sapiens

<400> 4689
Met Lys Gly Cys Leu Ser Cys Ser Tyr Ile Glu Lys Phe Thr Asp Phe
1 5 10 15

Leu Arg Leu Phe Val Ser Val His Leu Arg Arg Ile Glu Ser Tyr Ser
20 25 30

Gln Phe Pro Val Val Glu Phe Leu Thr Leu Leu Phe Lys Tyr Thr Phe
35 40 45

His Gln Pro Thr His Glu Gly Tyr Phe Ser Cys Leu Asp Ile Trp Thr
50 55 60

Leu Phe Leu Asp Tyr Leu Thr Ser Lys Ile Lys Ser Arg Leu Gly Asp
65 70 75 80

Lys Glu Ala Val Leu Asn Arg Tyr Glu Asp Ala Leu Val Leu Leu Leu
85 90 95

Thr Glu Val Leu Asn Arg Ile Gln Phe Arg Tyr Asn Gln Ala Gln Leu
100 105 110

Glu Glu Leu Asp Asp Glu Thr Leu Asp Asp Asp Gln Gln Thr Glu Trp
115 120 125

Gln Arg Tyr Leu Arg Gln Ser Leu Glu Val Val Ala Lys Val Met Glu
130 135 140

Leu Leu Pro Thr His Ala Phe Ser Thr Leu Phe Pro Val Leu Gln Asp
145 150 155 160

Asn Leu Glu Val Tyr Leu Gly Leu Gln Gln Phe Ile Val Thr Ser Gly
165 170 175

Ser Gly His Arg Leu Asn Ile Thr Ala Glu Asn Asp Cys Arg Arg Leu
180 185 190

His Cys Ser Leu Arg Asp Leu Ser Ser Leu Leu Gln Ala Val Gly Arg
195 200 205

Leu Ala Glu Tyr Phe Ile Gly Asp Val Phe Ala Ala Arg Phe Asn Asp
210 215 220

Ala Leu Thr Val Val Glu Arg Leu Val Lys Val Thr Leu Tyr Gly Ser
225 230 235 240

Gln Ile Lys Leu Tyr Asn Ile Glu Thr Ala Val Pro Ser Val Leu Lys
245 250 255

Pro Asp Leu Ile Asp Val His Ala Gln Ser Leu Ala Ala Leu Gln Ala
260 265 270

Tyr Ser His Trp Leu Ala Gln Tyr Cys Ser Glu Val His Arg Gln Asn
275 280 285

Thr Gln Gln Phe Val Thr Leu Ile Ser Thr Thr Met Asp Ala Ile Thr
290 295 300

Pro Leu Ile Ser Thr Lys Val Gln Asp Lys Leu Leu Leu Ser Ala Cys
305 310 315 320

His Leu Leu Val Ser Leu Ala Thr Thr Val Arg Pro Val Phe Leu Ile
325 330 335

Ser Ile Pro Ala Val Gln Lys Val Phe Asn Arg Ile Thr Asp Ala Ser
340 345 350

Ala Leu Arg Leu Val Asp Lys Ala Gln Val Leu Val Cys Arg Ala Leu
355 360 365

Ser Asn Ile Leu Leu Leu Pro Trp Pro Asn Leu Pro Glu Asn Glu Gln
370 375 380

Gln Trp Pro Val Arg Ser Ile Asn His Ala Ser Leu Ile Ser Ala Leu
385 390 395 400

Ser Arg Asp Tyr Arg Asn Leu Lys Pro Ser Ala Val Ala Pro Gln Arg
405 410 415

Lys Met Pro Leu Asp Asp Thr Lys Leu Ile Ile His Gln Thr Leu Ser
420 425 430

Val Leu Glu Asp Ile Val Glu Asn Ile Ser Gly Glu Ser Thr Lys Ser
435 440 445

Arg Gln Ile Cys Tyr Gln Ser Leu Gln Glu Ser Val Gln Val Ser Leu
450 455 460

Ala Leu Phe Pro Ala Phe Ile His Gln Ser Asp Val Thr Asp Glu Met
465 470 475 480

Leu Ser Phe Phe Leu Thr Leu Phe Arg Gly Leu Arg Val Gln Met Gly
485 490 495

Val Pro Phe Thr Glu Gln Ile Ile Gln Thr Phe Leu Asn Met Phe Thr
500 505 510

Arg Glu Gln Leu Ala Glu Ser Ile Leu His Glu Gly Ser Thr Gly Cys
515 520 525

Arg Val Val Glu Lys Phe Leu Lys Ile Leu Gln Val Val Val Gln Glu
530 535 540

Pro Gly Gln Val Phe Lys Pro Phe Leu Pro Ser Ile Ile Ala Leu Cys
545 550 555 560

Met Glu Gln Val Tyr Pro Ile Ile Ala Glu Arg Pro Ser Pro Asp Val
565 570 575

Lys Ala Glu Leu Phe Glu Leu Leu Phe Arg Thr Leu His His Asn Trp
580 585 590

Arg Tyr Phe Phe Lys Ser Thr Val Leu Ala Ser Val Gln Arg Gly Ile
595 600 605

Ala Glu Glu Gln Met Glu Asn Glu Pro Gln Phe Ser Ala Ile Met Gln
610 615 620

Ala Phe Gly Gln Ser Phe Leu Gln Pro Asp Ile His Leu Phe Lys Gln
625 630 635 640

Asn Leu Phe Tyr Leu Glu Thr Leu Asn Thr Lys Gln Lys Leu Tyr His
645 650 655

Lys Lys Ile Phe Arg Thr Ala Met Leu Phe Gln Phe Val Asn Val Leu
660 665 670

Leu Gln Val Leu Val His Lys Ser His Asp Leu Leu Gln Glu Glu Ile
675 680 685

Gly Ile Ala Ile Tyr Asn Met Ala Ser Val Asp Phe Asp Gly Phe Phe
690 695 700

Ala Ala Phe Leu Pro Glu Phe Leu Thr Ser Cys Asp Gly Val Asp Ala
705 710 715 720

Asn Gln Lys Ser Val Leu Gly Arg Asn Phe Lys Met Asp Arg Asp Leu

725 730 735

Pro Ser Phe Thr Gln Asn Val His Arg Leu Val Asn Asp Leu Arg Tyr
740 745 750

Tyr Arg Leu Cys Asn Asp Ser Leu Pro Pro Gly Thr Val Lys Leu
755 760 765

<210> 4690
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4690
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
1 5 10 15

Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
20 25 30

Arg Leu Lys
35

<210> 4691
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4691
Met Pro Phe Val Ala Trp Phe Cys Phe Cys Val Phe Ser Thr Ile His
1 5 10 15

Phe Ser Ile Leu Ala Ser Arg Lys Glu Asn Gln Pro Ser Arg Leu Ala
20 25 30

Arg Leu Lys
35

<210> 4692
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4692
Met Pro Leu Leu Gln Leu Phe Leu Phe Tyr Tyr Phe Leu Pro Ser Tyr
1 5 10 15

Leu Pro Ser Leu Pro Pro Glu Thr His Thr Phe Leu Phe Phe Pro Leu
20 25 30

Thr Ile Pro Gly Ile Phe Ser Arg Thr Thr Phe Leu Glu Val Leu Leu
35 40 45

Leu Leu Ile Leu Lys Phe Ala Val Pro Trp Leu Phe Ser Phe
50 55 60

<210> 4693
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4693
Met Ser Arg Leu Arg Glu Tyr Leu Ile Phe Leu Leu Phe Phe Ser Ser
1 5 10 15

Leu Ala Phe Asn Val Glu Thr Pro Phe Thr Ser His
20 25

<210> 4694
<211> 48
<212> PRT
<213> Homo sapiens

<400> 4694
Met Leu Pro Leu Ala Thr Ala Lys Gln Cys Gly Ile Ala Gly Leu Glu
1 5 10 15

Cys Leu Leu Ile Phe Leu Leu Gly Phe His Ile Gln Phe Pro Leu Arg
20 25 30

Gly Ile Thr Trp Ile Ile Ile Gly Thr Leu Glu Leu Met Ala Ser Met
35 40 45

<210> 4695
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4695
Met Ser Cys Phe Tyr Ile Leu Lys Val Ile Leu His Phe Leu Val Leu
1 5 10 15

Asn Tyr Ser Ile Pro Ile Lys Ile Cys Lys Ile Leu Lys Thr
20 25 30

<210> 4696
<211> 47
<212> PRT
<213> Homo sapiens

<400> 4696
Met Ile Phe Lys Leu Cys Lys Phe Asp Ser Ile Leu Leu Leu Gly Phe
1 5 10 15

Tyr Leu Ile Leu Val Val Cys Phe Ser Phe Ala Glu Val Ser Asn Cys

20 25 30

Ser Ser Pro Thr Ala Pro Lys Phe Ser Ile Leu Gly Ala Gln Leu
35 40 45

<210> 4697
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4697
Met Pro Cys Met His Cys Leu Leu Ser Ser Cys Ile Leu Ser Ala Cys
1 5 10 15

Phe Ser Pro Cys Ile Ser Ile Pro Trp Ala Pro Pro Val Val Pro Val
20 25 30

<210> 4698
<211> 116
<212> PRT
<213> Homo sapiens

<400> 4698
Ser Lys Asn Ile Phe His Ala Ala Arg Thr Pro Ala Thr Leu Phe Val
1 5 10 15

Val Ile Phe Ile Thr Tyr Val Ile Ala Gly Val Thr Gly Phe Ile Gly
20 25 30

Leu Asp Ile Ile Ala Ser Leu Cys Asn Met Ile Met Gly Leu Thr Leu
35 40 45

Ile Thr Leu Cys Thr Trp Ala Tyr Ile Arg Tyr Ser Gly Glu Tyr Arg
50 55 60

Glu Leu Gly Ala Val Ile Asp Gln Val Ala Ala Ala Leu Trp Asp Gln
65 70 75 80

Ala Leu Tyr Lys Leu Tyr Ser Ala Ala Ala Thr His Arg His Leu Tyr
85 90 95

His Gln Ala Phe Pro Thr Pro Lys Ser Glu Ser Thr Glu Gln Ser Glu
100 105 110

Lys Lys Lys Met
115

<210> 4699
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4699
Arg His Ser Leu Phe Trp Ile Leu Ile Gln Met Ile Leu Ile Ser Thr
1 5 10 15

Val Ser Gly Ser Ser Gln Ser Ala Leu Thr Pro Ser Ala Cys Gln Gly
20 25 30

His Pro Val Gln Ser Leu Ile Glu Gly Glu Phe Pro Gln
35 40 45

<210> 4700
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4700
Met Leu Ser Ile Phe Cys Phe Ile Trp Phe Ile Tyr Phe Leu Gly Phe
1 5 10 15

Phe Met His Ile Leu Trp His
20

<210> 4701
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4701
Met Pro Glu Leu Phe Leu Leu Val Pro Leu Pro Gly Thr Leu Leu Leu
1 5 10 15

Ser Leu Ser His Gly Trp Pro Leu Ser His Ser Pro Ser Ser Tyr Ser
20 25 30

Glu Thr Thr Phe
35

<210> 4702
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4702
Met Leu Pro Ile Phe Val Thr Leu Phe Phe Val Cys Phe Val Leu Phe
1 5 10 15

Cys Leu Phe Cys Pro Thr Lys Thr Asp Leu Ser Ser Cys Asp Thr Thr
20 25 30

Met

<210> 4703

<211> 496
<212> PRT
<213> Homo sapiens

<400> 4703
Arg Ala Cys Asn Leu Pro Gly Arg Leu Arg Tyr Ala His Arg Leu Ser
1 5 10 15

Gly Phe Leu His Ser His Leu Arg Arg Ile Trp Leu Arg Arg Lys Trp
20 25 30

Arg Cys His Trp Pro Arg Pro Leu Pro Gln Ser Cys Val Gly Thr Glu
35 40 45

Gly Gly Leu Gln Val Arg Asp Thr Ser Ser Arg Ile Ala Lys Gly Gly
50 55 60

Val Asp His Thr Lys Met Ser Leu His Gly Ala Ser Gly Gly His Glu
65 70 75 80

Arg Ser Arg Asp Arg Arg Arg Ser Ser Asp Arg Ser Arg Asp Ser Ser
85 90 95

His Glu Arg Thr Glu Ser Gln Leu Thr Pro Cys Ile Arg Asn Val Thr
100 105 110

Ser Pro Thr Arg Gln His His Val Glu Arg Glu Lys Asp His Ser Ser
115 120 125

Ser Arg Pro Ser Ser Pro Arg Pro Gln Lys Ala Ser Pro Asn Gly Ser
130 135 140

Ile Ser Ser Ala Gly Asn Ser Ser Arg Asn Ser Ser Gln Ser Ser Ser
145 150 155 160

Asp Gly Ser Cys Lys Thr Ala Gly Glu Met Val Phe Val Tyr Glu Asn
165 170 175

Ala Lys Glu Gly Ala Arg Asn Ile Arg Thr Ser Glu Arg Val Thr Leu
180 185 190

Ile Val Asp Asn Thr Arg Phe Val Val Asp Pro Ser Ile Phe Thr Ala
195 200 205

Gln Pro Asn Thr Met Leu Gly Arg Met Phe Gly Ser Gly Arg Glu His
210 215 220

Asn Phe Thr Arg Pro Asn Glu Lys Gly Glu Tyr Glu Val Ala Glu Gly
225 230 235 240

Ile Gly Ser Thr Val Phe Arg Ala Ile Leu Asp Tyr Tyr Lys Thr Gly
245 250 255

Ile Ile Arg Cys Pro Asp Gly Ile Ser Ile Pro Glu Leu Arg Glu Ala
260 265 270

Cys Asp Tyr Leu Cys Ile Ser Phe Glu Tyr Ser Thr Ile Lys Cys Arg
275 280 285

Asp Leu Ser Ala Leu Met His Glu Leu Ser Asn Asp Gly Ala Arg Arg
290 295 300

Gln Phe Glu Phe Tyr Leu Glu Glu Met Ile Leu Pro Leu Met Val Ala
305 310 315 320

Ser Ala Gln Ser Gly Glu Arg Glu Cys His Ile Val Val Leu Thr Asp
325 330 335

Asp Asp Val Val Asp Trp Asp Glu Glu Tyr Pro Pro Gln Met Gly Glu
340 345 350

Glu Tyr Ser Gln Ile Ile Tyr Ser Thr Lys Leu Tyr Arg Phe Phe Lys
355 360 365

Tyr Ile Glu Asn Arg Asp Val Ala Lys Ser Val Leu Lys Glu Arg Gly
370 375 380

Leu Lys Lys Ile Arg Leu Gly Ile Glu Gly Tyr Pro Thr Tyr Lys Glu
385 390 395 400

Lys Val Lys Lys Arg Pro Gly Gly Arg Pro Glu Val Ile Tyr Asn Tyr
405 410 415

Val Gln Arg Pro Phe Ile Arg Met Ser Trp Glu Lys Glu Glu Gly Lys
420 425 430

Ser Arg His Val Asp Phe Gln Cys Val Lys Ser Lys Ser Ile Thr Asn
435 440 445

Leu Ala Ala Ala Ala Ala Asp Ile Pro Gln Asp Gln Leu Val Val Met
450 455 460

His Pro Thr Pro Gln Val Asp Glu Leu Asp Ile Leu Pro Ile His Pro
465 470 475 480

Pro Ser Gly Asn Ser Asp Leu Asp Pro Asp Ala Gln Asn Pro Met Leu
485 490 495

<210> 4704
<211> 63
<212> PRT
<213> Homo sapiens

<400> 4704
Met Lys Leu Ser Ser Leu Ser Arg Leu Thr Lys Ser Thr Ser Thr Ala
1 5 10 15

Gly Ala Leu Trp Asn Val Pro Thr Gly Arg Thr Trp Leu Leu Val Leu
20 25 30

Ala Ser Thr Ser Ile Ser Phe Ser Ile Ser Ser Pro Thr Thr Ser Trp
35 40 45

Asn Cys Ser Ala Ala Ser Thr Gly Pro Met Ser Leu Thr Pro Ser
50 55 60

<210> 4705
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4705
Met Gly Ser Gly Ile Leu Trp Glu Val Gly Arg Pro Val Asp Leu Cys
1 5 10 15

Phe Asp Gly Cys Trp Arg Ser Phe His Asp Trp Asn Val Leu Ile Phe
20 25 30

Leu Ile Tyr Leu Leu Leu Gln Gln Ser Ser Tyr Ser Trp Thr Val Asp
35 40 45

Ile Ser Glu Leu Asn Asn Pro
50 55

<210> 4706
<211> 96
<212> PRT
<213> Homo sapiens

<400> 4706
Met Val Cys Gln Ser Leu Leu Leu Leu Asp Gln Leu Ser Cys Pro Ser
1 5 10 15

Val Ser Phe Leu Gly Leu Leu Cys Gly Leu Leu Val Cys Lys His Leu
20 25 30

Ser Val Ser Lys Pro Ala Val Arg Ser Ser Leu Thr Ile Thr Glu Tyr
35 40 45

Thr Trp Tyr Thr Lys Thr His Val Glu Glu Lys Lys Ile Thr Glu Val
50 55 60

Pro Lys Asn Thr Tyr Asn Trp Thr Lys Asn Trp Leu Ile Phe Phe Phe
65 70 75 80

Lys Glu Arg Ala Ala Ser Val Tyr Tyr Leu Gln Arg Ser Ser Phe His
85 90 95

<210> 4707
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4707
Met Tyr Gln Val Val Pro Leu Lys Lys Cys Leu Ser Leu Leu Gly Thr
1 5 10 15

Leu Met Thr Gln Pro Ile Thr Leu Ala
20 25

<210> 4708
<211> 169
<212> PRT
<213> Homo sapiens

<400> 4708
Met Ala Glu Pro Glu Lys Ala Pro Ala Leu Ser Ile Leu Leu Tyr Val
1 5 10 15

Gln Ala Phe Gln Val Gly Met Pro Pro Pro Gly Cys Cys Arg Gly Pro
20 25 30

Leu Arg Pro Lys Thr Leu Leu Leu Thr Ser Ser Glu Ile Phe Leu Leu
35 40 45

Asp Glu Asp Cys Val His Tyr Pro Leu Pro Glu Phe Ala Lys Glu Pro
50 55 60

Pro Gln Arg Asp Arg Tyr Arg Leu Asp Asp Gly Arg Arg Val Arg Asp
65 70 75 80

Leu Asp Arg Val Leu Met Gly Tyr Gln Thr Tyr Pro Gln Ala Leu Thr
85 90 95

Leu Val Phe Asp Asp Val Gln Gly His Asp Leu Met Gly Ser Val Thr
100 105 110

Leu Asp His Phe Gly Glu Val Pro Gly Gly Pro Ala Arg Ala Ser Gln
115 120 125

Gly Arg Glu Val Gln Trp Gln Val Phe Val Pro Ser Ala Glu Ser Arg
130 135 140

Glu Lys Leu Ile Ser Leu Leu Ala Arg Gln Trp Glu Ala Leu Cys Gly
145 150 155 160

Arg Glu Leu Pro Val Glu Leu Thr Gly
165

<210> 4709
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4709
Met Ser Pro Cys Pro Leu Leu Cys Phe Ser Val Gly Phe
1 5 10

<210> 4710
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4710

Met Leu Pro Cys Val Leu Asp Gly Phe Leu Gln Ala Cys Leu
1 5 10

<210> 4711
<211> 48
<212> PRT
<213> Homo sapiens

<400> 4711
Met Glu Leu Leu Cys Trp Ser Cys Trp Cys Val Cys Leu Gly Trp Leu
1 5 10 15

His Thr Gly Trp Pro Ala Ser Gly Thr Ala Leu Gly Thr Met Arg Ser
20 25 30

Leu Thr Arg Thr Pro Arg Gln Ser Ala Thr Thr Ala Gly Cys Thr Asn
35 40 45

<210> 4712
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4712
Glu Pro Leu Cys Leu Ser Arg Leu Val Leu Ser Thr Val His Phe Ser
1 5 10 15

Leu Ser Val Pro Trp Ala Leu Met Lys Lys Gln Asn Ala Pro Asn Phe
20 25 30

Ile His Leu Pro Ser Leu
35

<210> 4713
<211> 72
<212> PRT
<213> Homo sapiens

<400> 4713
Met Ser Ser Lys Thr Ala Ser Thr Asn Asn Ile Ala Gln Ala Arg Arg
1 5 10 15

Thr Val Gln Gln Leu Arg Leu Glu Ala Ser Ile Glu Arg Ile Lys Val
20 25 30

Ser Lys Ala Ser Ala Asp Leu Met Ser Tyr Cys Glu Glu His Ala Arg
35 40 45

Ser Asp Pro Leu Leu Ile Gly Ile Pro Thr Ser Glu Asn Pro Phe Lys
50 55 60

Asp Lys Lys Thr Cys Ile Ile Leu

65 70

<210> 4714
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4714
Trp Val Asp Trp Gln Arg Lys Trp Thr Thr Lys Phe Phe Met Leu Arg
1 5 10 15

Ser Phe Leu Leu Glu Thr Ser Gln Ile Phe Arg Phe Leu Trp Ile Met
20 25 30

Lys Gln Lys Ser Thr Glu Asp Leu Leu Leu Leu Asn Leu Ser Trp Gln
35 40 45

Arg Met Leu Gln Gln Leu Ser Thr Thr
50 55

<210> 4715
<211> 93
<212> PRT
<213> Homo sapiens

<400> 4715
Gly Lys Gly Ser Gln Pro Pro Ser Pro Pro Ser Pro Ala Pro Ser Ser
1 5 10 15

Phe Ser Ser Thr Ser Val Ser Ser Leu Glu Ala Glu Ala Tyr Ala Ala
20 25 30

Phe Pro Gly Leu Gly Gln Val Pro Lys Gln Leu Ala Gln Leu Ser Glu
35 40 45

Ala Lys Asp Leu Gln Ala Arg Lys Ala Phe Asn Cys Lys Tyr Cys Asn
50 55 60

Lys Glu Tyr Leu Ser Leu Gly Ala Leu Lys Met His Ile Arg Ser His
65 70 75 80

Thr Leu Pro Cys Val Cys Gly Thr Cys Gly Lys Leu Leu
85 90

<210> 4716
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4716
Met Gly Ser Cys Thr Trp Ser Ile Trp Leu Trp Met Val Ser Gly Val
1 5 10 15

Ala Cys Arg Ser Gln Gly Leu Ser Asp Cys Ser Pro Lys Ala Phe Leu
20 25 30

Trp Ser Phe Ala
35

<210> 4717
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4717
Met Tyr Gln Thr Ala Trp Ile Asp Ser Leu Pro Leu Leu Ser Phe Leu
1 5 10 15

Val Thr Ser Val Thr
20

<210> 4718
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4718
Met Gly Leu Val Ser Asn Phe Val Ile Phe Leu Val Phe Val Ser Asp
1 5 10 15

Phe Leu Phe Lys Asn Lys Val Leu Ser Glu Cys Phe Asp Phe Pro Val
20 25 30

Thr Thr Lys Phe Leu
35

<210> 4719
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4719
Met Ala His Ser Thr Ala Arg Trp Leu Trp Trp Leu Pro Arg Met Trp
1 5 10 15

Thr Pro Val Pro Ser Trp Arg Tyr Ser Leu
20 25

<210> 4720
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4720
Tyr Ser Leu Thr
1

<210> 4721
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4721
Glu Pro Pro Ser Leu Glu Leu Trp Glu Lys Leu Leu Leu Leu Glu Val
1 5 10 15

Pro Val Ala Glu Lys Phe Pro Asn Arg Thr Asp Ser Phe Ile Pro Pro
20 25 30

Glu Phe Arg Glu Arg Ser Met Trp Thr His Val Pro Leu His Gln Arg
35 40 45

Leu Leu Ser Arg His Ser Ser Ser Thr
50 55

<210> 4722
<211> 111
<212> PRT
<213> Homo sapiens

<400> 4722
Phe Leu Leu Phe Leu Leu Phe Leu Leu Gln Gly Lys Tyr Lys Ile Ser
1 5 10 15

Leu Glu Trp Ala Ser Arg Phe Ile Gln Pro Pro Pro Gly His Arg Phe
20 25 30

Arg Glu Arg Glu Glu Glu Gly Arg Phe Gly Ala Ser Thr Thr Thr Ser
35 40 45

Phe Pro His Ala Leu Leu Ser Pro Phe Pro Ser Phe Ser Thr Ser Ser
50 55 60

Phe Pro Ser Leu Pro Ser Met Ile Cys Pro Cys Pro Ser Val Ser Ser
65 70 75 80

Ser Phe Pro Ser Phe Leu Pro Phe Leu Leu Pro Ser Leu Ala Gly Ser
85 90 95

Asn Glu Gln Val Ala Leu Asn Leu Asp Ser Thr Ile Thr Gly Gly
100 105 110

<210> 4723
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4723
Met Ser Pro Pro Ala Leu Phe Leu Phe Ile His Val Leu Phe Leu Tyr
1 5 10 15

Gln Tyr Cys Phe Gly Tyr Val Glu Ser Leu Ala Phe Leu Tyr Lys Phe
20 25 30

<210> 4724
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4724
Met Trp Ser Val Arg Ser Ile Leu Phe Val Leu Leu Ser Leu Met
1 5 10 15

<210> 4725
<211> 613
<212> PRT
<213> Homo sapiens

<400> 4725
Met Phe Arg Cys Gly Gly Leu Ala Ala Gly Ala Leu Lys Gln Lys Leu
1 5 10 15

Val Pro Leu Val Arg Thr Val Cys Val Arg Ser Pro Arg Gln Arg Asn
20 25 30

Arg Leu Pro Gly Asn Leu Phe Gln Arg Trp His Val Pro Leu Glu Leu
35 40 45

Gln Met Thr Arg Gln Met Ala Ser Ser Gly Ala Ser Gly Gly Lys Ile
50 55 60

Asp Asn Ser Val Leu Val Leu Ile Val Gly Leu Ser Thr Val Gly Ala
65 70 75 80

Gly Ala Tyr Ala Tyr Lys Thr Met Lys Glu Asp Glu Lys Arg Tyr Asn
85 90 95

Glu Arg Ile Ser Gly Leu Gly Leu Thr Pro Glu Gln Lys Gln Lys Lys
100 105 110

Ala Ala Leu Ser Ala Ser Glu Gly Glu Glu Val Pro Gln Asp Lys Ala
115 120 125

Pro Ser His Val Pro Phe Leu Leu Ile Gly Gly Gly Thr Ala Ala Phe
130 135 140

Ala Ala Ala Arg Ser Ile Arg Ala Arg Asp Pro Gly Ala Arg Val Leu
145 150 155 160

Ile Val Ser Glu Asp Pro Glu Leu Pro Tyr Met Arg Pro Pro Leu Ser
165 170 175

Lys Glu Leu Trp Phe Ser Asp Asp Pro Asn Val Thr Lys Thr Leu Arg
180 185 190

Phe Lys Gln Trp Asn Gly Lys Glu Arg Ser Ile Tyr Phe Gln Pro Pro
195 200 205

Ser Phe Tyr Val Ser Ala Gln Asp Leu Pro His Ile Glu Asn Gly Gly
210 215 220

Val Ala Val Leu Thr Gly Lys Lys Val Val Gln Leu Asp Val Arg Asp
225 230 235 240

Asn Met Val Lys Leu Asn Asp Gly Ser Gln Ile Thr Tyr Glu Lys Cys
245 250 255

Leu Ile Ala Thr Gly Gly Thr Pro Arg Ser Leu Ser Ala Ile Asp Arg
260 265 270

Ala Gly Ala Glu Val Lys Ser Arg Thr Thr Leu Phe Arg Lys Ile Gly
275 280 285

Asp Phe Arg Ser Leu Glu Lys Ile Ser Arg Glu Val Lys Ser Ile Thr
290 295 300

Ile Ile Gly Gly Gly Phe Leu Gly Ser Glu Leu Ala Cys Ala Leu Gly
305 310 315 320

Arg Lys Ala Arg Ala Leu Gly Thr Glu Val Ile Gln Leu Phe Pro Glu
325 330 335

Lys Gly Asn Met Gly Lys Ile Leu Pro Glu Tyr Leu Ser Asn Trp Thr
340 345 350

Met Glu Lys Val Arg Arg Glu Gly Val Lys Val Met Pro Asn Ala Ile
355 360 365

Val Gln Ser Val Gly Val Ser Ser Gly Lys Leu Leu Ile Lys Leu Lys
370 375 380

Asp Gly Arg Lys Val Glu Thr Asp His Ile Val Ala Ala Val Gly Leu
385 390 395 400

Glu Pro Asn Val Glu Leu Ala Lys Thr Gly Gly Leu Glu Ile Asp Ser
405 410 415

Asp Phe Gly Gly Phe Arg Val Asn Ala Glu Leu Gln Ala Arg Ser Asn
420 425 430

Ile Trp Val Ala Gly Asp Ala Ala Cys Phe Tyr Asp Ile Lys Leu Gly
435 440 445

Arg Arg Arg Val Glu His His Asp His Ala Val Val Ser Gly Arg Leu
450 455 460

Ala Gly Glu Asn Met Thr Gly Ala Ala Lys Pro Tyr Trp His Gln Ser
465 470 475 480

Met Phe Trp Ser Asp Leu Gly Pro Asp Val Gly Tyr Glu Ala Ile Gly
485 490 495

Leu Val Asp Ser Ser Leu Pro Thr Val Gly Val Phe Ala Lys Ala Thr
500 505 510

Ala Gln Asp Asn Pro Lys Ser Ala Thr Glu Gln Ser Gly Thr Gly Ile
515 520 525

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```
Arg Ser Glu Ser Glu Thr Glu Ser Glu Ala Ser Glu Ile Thr Ile Pro
    530                 535                 540

Pro Ser Thr Pro Ala Val Pro Gln Ala Pro Val Gln Gly Glu Asp Tyr
545                 550                 555                 560

Gly Lys Gly Val Ile Phe Tyr Leu Arg Asp Lys Val Val Val Gly Ile
                565                 570                 575

Val Leu Trp Asn Ile Phe Asn Arg Met Pro Ile Ala Arg Lys Ile Ile
            580                 585                 590

Lys Asp Gly Glu Gln His Glu Asp Leu Asn Glu Val Ala Lys Leu Phe
        595                 600                 605

Asn Ile His Glu Asp
    610
```

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<210> 4726
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4726
```
Met Glu Lys Arg Glu Ala Tyr Ile Ser Ser His Leu Leu Ser Met Ser
  1               5                  10                  15

Leu Leu Arg Thr Cys Leu Ile Leu Arg Met Val Val Trp Leu Ser Ser
             20                  25                  30

Leu Gly Arg Arg
         35
```

<210> 4727
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4727
```
Met Pro Phe Ile Pro Ser Phe Pro Phe Leu Trp Pro Leu Leu
  1               5                  10
```

<210> 4728
<211> 1
<212> PRT
<213> Homo sapiens

<400> 4728
```
Met
  1
```

<210> 4729
<211> 30

<212> PRT
<213> Homo sapiens

<400> 4729
Met Leu Val Ala Leu Leu Cys Leu Ile Arg Ile Leu Gly Glu Met Glu
1 5 10 15

Ser Phe Pro Gln Gly Ala Ala Gly Gly Arg Ile Gly Ser Ile
20 25 30

<210> 4730
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4730
Glu Gln Ser Leu Leu Tyr Phe Ile Leu Cys Cys Phe
1 5 10

<210> 4731
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4731
Met Gly Leu Tyr Lys Gly Leu Glu Ala Lys Leu Leu Gln Thr Val Leu
1 5 10 15

Thr Ala Ala Leu Met Phe Leu Val Tyr Glu Lys Leu Thr Ala Ala Thr
20 25 30

Phe Thr Val Met Gly Leu Lys Arg Ala His Gln His
35 40

<210> 4732
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4732
Met Leu Pro Leu Leu Ile Trp Phe Leu Ala Ser Pro Cys Val Leu Arg
1 5 10 15

Ala Ser Gln Thr Ile His Leu Trp Val Ala Leu Leu Phe Val Ile
20 25 30

<210> 4733
<211> 181
<212> PRT
<213> Homo sapiens

<400> 4733
Gln Leu Ala Ala Pro Ala Phe Pro Ser Pro Ser Leu Ser Tyr Arg Phe

```
1               5                  10                  15

Met Leu Val Leu Ala Ser Asn Leu Pro Glu Gln Phe Asp Cys Ala Ile
            20                  25                  30

Asn Ser Arg Ile Asp Val Met Val His Phe Asp Leu Pro Gln Gln Glu
        35                  40                  45

Glu Arg Glu Arg Leu Val Arg Leu His Phe Asp Asn Cys Val Leu Lys
    50                  55                  60

Pro Ala Thr Glu Gly Lys Arg Arg Leu Lys Leu Ala Gln Phe Asp Tyr
65                  70                  75                  80

Gly Arg Lys Cys Ser Glu Val Ala Arg Leu Thr Glu Gly Met Ser Gly
                85                  90                  95

Arg Glu Ile Ala Gln Leu Ala Val Ser Trp Gln Ala Thr Ala Tyr Ala
            100                 105                 110

Ser Lys Asp Gly Val Leu Thr Glu Ala Met Met Asp Ala Cys Val Gln
        115                 120                 125

Asp Ala Val Gln Gln Tyr Arg Gln Lys Met Arg Trp Leu Lys Ala Glu
    130                 135                 140

Gly Pro Gly Arg Gly Val Asp Thr Pro Tyr Pro Glu Ser Lys Ala Arg
145                 150                 155                 160

Pro His Leu Met Glu Pro Gly His Gly Pro Leu Leu Pro Leu Pro Cys
                165                 170                 175

Arg Pro Leu His Ile
            180
```

<210> 4734
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4734
Met Ile Ile Leu
1

<210> 4735
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4735
Met Ile Ile Leu
1

<210> 4736
<211> 4

<212> PRT
<213> Homo sapiens

<400> 4736
Met Ile Ile Leu
1

<210> 4737
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4737
Met Ile Ile Leu
1

<210> 4738
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4738
Met Tyr Ser Leu Ala Ser Ile Met Gln Ile Lys Lys Tyr Phe Ser Leu
1 5 10 15

Ser Val Phe Leu Ala Leu Val Ser Ser Cys Cys Phe Cys Leu Asp Leu
20 25 30

Glu Arg Leu Gln Leu Ser Asn
35

<210> 4739
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4739
Met Ser Ala Thr Val Ser Gly Arg Ser His Leu Trp Pro Leu Phe Ala
1 5 10 15

Cys Glu Lys Val
20

<210> 4740
<211> 97
<212> PRT
<213> Homo sapiens

<400> 4740
Leu Met Leu Ser Leu Cys Leu Pro Pro Ile Leu Ser Gly Thr Gly Asp
1 5 10 15

Gly Gly Ser Pro Cys Glu Pro Phe Ser Cys Cys Ser Gly Arg Ala Ser

```
            20                  25                  30

Ser Thr Leu Ser Gln Pro Gly Pro Met Glu Asn Asp Gly Leu Gly Phe
         35                  40                  45

Leu Arg Pro Tyr Leu Met Pro Leu Gln Phe Met Ser Pro Thr Arg Pro
     50                  55                  60

Arg Gly Ser Gly Trp Glu Arg Ala Pro Gly Cys Pro Val Thr Pro Leu
 65                  70                  75                  80

Thr Leu Pro Ser Pro Val Pro Asn Met Pro Cys Asn Lys Ile Arg Glu
                 85                  90                  95

Asp
```

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<210> 4741
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4741
Met Val Val Cys His Thr His Leu Trp Asp Ser Ala Trp Leu Phe Gly
  1   5   10   15

Cys His Leu

<210> 4742
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4742
Cys Val Phe Thr Val Asp Trp Ser Leu Lys Ala Pro Leu Gly Glu Asn
  1   5   10   15

Met

<210> 4743
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4743
Met Ser Ile Phe Arg Cys Phe Lys Leu Pro Phe Val Phe Glu Ala Phe
  1   5   10   15

Leu Ile Phe Leu Ala Ile Ser Tyr Phe Leu Phe Cys Asp Lys Lys Ile
            20   25   30

Arg Gln Thr Cys
         35

<210> 4744
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4744
Met Val Asp Pro Leu Ala Ile Ser Cys Gly Val Leu Leu Leu Leu Cys
  1   5   10   15

His Phe Ser Met Pro Glu Asp Thr Lys Met Ile Ser Arg Gln Ser Tyr
             20   25   30

His Ile Ala Ala Ser Leu
         35

<210> 4745
<211> 81
<212> PRT
<213> Homo sapiens

<400> 4745
Met Arg Thr Asn Gln Ser Leu Cys Ser Phe Leu Leu Trp Ser Val Pro
  1   5   10   15

Phe His Gln Ala Ala Cys Pro Gln Ala Lys Asp His Pro Leu Glu Pro
             20   25   30

Ser Met His Pro Glu Gly Thr Gln Leu Gln Ser Cys Ser Thr Met Leu
         35   40   45

Gly Pro Arg Gln Leu Ser Ser Glu Lys Gln Pro Leu Leu Pro Pro Arg
     50   55   60

Ser His Leu Lys Ser Ser Pro Met Leu Arg Ala Cys Lys Gly Leu Thr
 65   70   75   80

Ser

<210> 4746
<211> 50
<212> PRT
<213> Homo sapiens

<400> 4746
Met Ala Ile Leu Arg Thr Trp Ile Lys Ile Ser Met Met Thr Val Leu
  1   5   10   15

Met Thr Val Thr Pro Thr Asn Gln Met Glu Lys Val Thr Gly Met Asn
             20   25   30

Leu Cys Thr Val Ile Met Val Arg Glu Thr Thr Met Lys Lys Arg Ser
         35   40   45

Gln Val
50

<210> 4747
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4747
Met Leu Thr Gly Val Leu Leu Ser His Ile Leu Cys Ala Val Ile Cys
1 5 10 15

<210> 4748
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4748
Met Ser Leu Leu Ser Asn Val Thr Trp Ser Phe Tyr Thr Leu His Phe
1 5 10 15

Phe Phe Ile Ile Met Lys Asn Gly Ile Pro Pro Gly Ser Ser Lys Ile
20 25 30

Leu Leu Thr Glu Thr Asn Val Gly Val Arg Lys Ile Thr Ile
35 40 45

<210> 4749
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4749
Met Phe Thr Val Leu Leu Leu Glu Leu Phe Ser His Pro Thr Tyr Ala
1 5 10 15

Gly Phe Ser Ile Ala Phe Glu Phe Cys Val
20 25

<210> 4750
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4750
Met Leu Pro His Leu Pro Leu Ser Gly Ser Leu Leu Cys Leu Ser Cys
1 5 10 15

Ser Val Arg Ser Phe Ser Cys Ser Thr Asp Trp Leu Pro Pro Ser Asp
20 25 30

Ser Gly Thr Trp Leu Ser Lys Leu Thr Asn Phe Thr Ser Cys Asn Ile
35 40 45

His His Gln
50

<210> 4751
<211> 61
<212> PRT
<213> Homo sapiens

<400> 4751
Trp Arg Arg Gly Val Gly Ser Cys Cys Trp Pro Ser Gln Pro Cys Trp
1 5 10 15

Trp Pro Thr Ser Ala Arg Leu Arg Thr Arg Thr Val Pro Ser Ser Val
20 25 30

Cys Ser Cys Arg Trp Thr Thr Trp Ser Pro Val Trp Pro Trp Ser Ala
35 40 45

Arg Lys Leu Leu Gln Ser Cys Arg Arg Thr Ser Met Ser
50 55 60

<210> 4752
<211> 115
<212> PRT
<213> Homo sapiens

<400> 4752
Met Lys Pro Val Ser Leu Ile Ser Leu Ser Ile Leu Ser Leu Trp Gly
1 5 10 15

Ile Leu Val Ala Phe Leu Val Thr Glu Cys Ala Cys Arg Thr Leu Ser
20 25 30

Ser Pro Trp Pro Leu Ala Ala Val Leu Cys Ser Pro Cys Leu Cys Arg
35 40 45

Ala Trp Pro Pro Gln Gln Ala Cys Trp Leu Trp Ala Ser Pro Val Leu
50 55 60

Arg Leu His Ala His Ser Leu Gly Ser Leu Ser His Leu Gly Ser Gly
65 70 75 80

Pro Thr Ser Lys Leu Val Asn Leu Gly Leu His Pro Val Ala Arg Cys
85 90 95

Leu Leu Pro Asp Ala Phe Ala Cys Leu Ser His Thr Gly Ser Ser Ser
100 105 110

Lys Ala Pro
115

<210> 4753
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4753
Met Ile Ile Tyr Leu Tyr Leu Phe Val Val Ile Val Ala
1 5 10

<210> 4754
<211> 345
<212> PRT
<213> Homo sapiens

<400> 4754
Met Ala Ala Ala Phe Arg Pro Ser Asn Arg Val Leu Leu Gln Ala Leu
1 5 10 15

Gln Ile Leu Val Tyr Pro Gly Val Gly Gly Ser Gly Ser Val Ser Cys
20 25 30

Arg Cys Pro Leu Gly Ala Lys Arg Tyr Leu Leu Thr Asp Asn Val Val
35 40 45

Lys Leu Lys Glu Phe Gln Gln Lys Lys Val Ala Val Ala Cys Asn Leu
50 55 60

Ser Gly Thr Lys Glu Thr Tyr Phe Arg Asn Leu Lys Lys Lys Leu Thr
65 70 75 80

Gln Asn Lys Leu Ile Leu Lys Gly Glu Leu Ile Thr Leu Leu His Leu
85 90 95

Cys Glu Ser Arg Asp His Val Glu Leu Ala Lys Asn Val Ile Tyr Arg
100 105 110

Tyr His Ala Glu Asn Lys Asn Phe Thr Leu Gly Glu Tyr Lys Phe Gly
115 120 125

Pro Leu Phe Val Arg Leu Cys Tyr Glu Leu Asp Leu Glu Glu Ser Ala
130 135 140

Val Glu Leu Met Lys Asp Gln His Leu Arg Gly Phe Phe Ser Asp Ser
145 150 155 160

Thr Ser Phe Asn Ile Leu Met Asp Met Leu Phe Ile Lys Gly Lys Tyr
165 170 175

Lys Ser Ala Leu Gln Val Leu Ile Glu Met Lys Asn Gln Asp Val Lys
180 185 190

Phe Thr Lys Asp Thr Tyr Val Leu Ala Phe Ala Ile Cys Tyr Lys Leu
195 200 205

Asn Ser Pro Glu Ser Phe Lys Ile Cys Thr Thr Leu Arg Glu Glu Ala
210 215 220

Leu Leu Lys Gly Glu Ile Leu Ser Arg Arg Ala Ser Cys Phe Ala Val
225 230 235 240

```
Ala Leu Ala Leu Asn Gln Asn Glu Met Ala Lys Ala Val Ser Ile Phe
                245                 250                 255

Ser Gln Ile Met Asn Pro Glu Ser Ile Ala Cys Ile Asn Leu Asn Leu
            260                 265                 270

Ala Lys Val Arg Glu Lys Val Lys Asp Val Pro Ala Leu Val Ala Lys
        275                 280                 285

Phe Asp Glu Ile Tyr Gly Thr Leu His Ile Thr Gly Gln Val Thr Thr
    290                 295                 300

Asp Ser Leu Asp Ala Val Leu Cys His Thr Pro Arg Asp Arg Lys Ser
305                 310                 315                 320

His Thr Leu Leu Leu Asn Lys Arg Met Val Ser Arg Arg Thr Phe Gln
                325                 330                 335

Pro Leu Ser Gln Ser Leu Leu Ala Glu
            340                 345
```

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```
<210> 4755
<211> 107
<212> PRT
<213> Homo sapiens

<400> 4755
Met Gly Ser Ser Leu Gly Leu Cys Leu Gly Lys Ala Pro Ser Ser Ser
  1               5                  10                  15

Gln Leu Phe Leu Phe Phe Ala Met Gly Ser Asp Val Gln Pro Gly Thr
             20                  25                  30

Glu Met Glu Ile Val Val Glu Glu Thr Ile Ser Val Arg Asp Cys Leu
         35                  40                  45

Lys Leu Met Leu Lys Lys Ser Gly Leu Gln Gly Asp Ala Trp His Leu
     50                  55                  60

Arg Lys Met Asp Trp Cys Tyr Glu Ala Gly Glu Pro Leu Cys Glu Glu
 65                  70                  75                  80

Asp Ala Thr Leu Lys Glu Leu Leu Ile Cys Ser Gly Asp Thr Leu Leu
                85                  90                  95

Leu Ile Glu Gly Gln Leu Pro Pro Leu Gly Ser
            100                 105



<210> 4756
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4756
Met Phe Ala Ala Ser Ile Trp Ser Ala Leu Pro Val Cys Leu Phe Leu
  1               5                  10                  15
```

```
Phe Ser Val Phe Ser Ile Phe Ser Ser Leu Val His Ala Phe Cys Phe
             20                  25                  30

Ala Leu Val Pro Gly Ala Tyr Leu Pro Asn
         35                  40
```

<210> 4757
<211> 69
<212> PRT
<213> Homo sapiens

<400> 4757

```
Met Phe Tyr Ser Val Ala Phe Ser Ile Phe Ala Met Leu Cys Asn His
  1               5                  10                  15

Arg His Tyr Pro Phe Leu Glu Leu Phe Arg His Pro Arg Gln Thr Leu
             20                  25                  30

Cys Ile His Lys Lys Ile Thr Ser Tyr Leu Ser Leu Pro Leu Val Phe
         35                  40                  45

Gly Asn Leu Cys Tyr Thr Gly Lys Leu Cys Trp Leu Cys Val Cys Val
     50                  55                  60

Glu Phe Gly Leu Phe
 65
```

<210> 4758
<211> 350
<212> PRT
<213> Homo sapiens

<400> 4758

```
Met Arg Phe Asn Leu Lys Glu Val Leu Gln Val Met Pro Ser Asp Ser
  1               5                  10                  15

Phe Phe Phe Ser Ile Val Arg Asp Pro Ala Ala Leu Ala Arg Ser Ala
             20                  25                  30

Phe Ser Tyr Tyr Lys Ser Thr Ser Ser Ala Phe Arg Lys Ser Pro Ser
         35                  40                  45

Leu Ala Ala Phe Leu Ala Asn Pro Arg Gly Phe Tyr Arg Pro Gly Ala
     50                  55                  60

Arg Gly Asp His Tyr Ala Arg Asn Leu Leu Trp Phe Asp Phe Gly Leu
 65                  70                  75                  80

Pro Phe Pro Pro Glu Lys Arg Ala Lys Arg Gly Asn Ile His Pro Pro
                 85                  90                  95

Arg Asp Pro Asn Pro Pro Gln Leu Gln Val Leu Pro Ser Gly Ala Gly
            100                 105                 110

Pro Arg Ala Gln Thr Leu Asn Pro Asn Ala Leu Ile His Pro Val Ser
        115                 120                 125
```

```
Thr Val Thr Asp His Arg Ser Gln Ile Ser Ser Pro Ala Ser Phe Asp
    130                 135                 140

Leu Gly Ser Ser Ser Phe Ile Gln Trp Gly Leu Ala Trp Leu Asp Ser
145                 150                 155                 160

Val Phe Asp Leu Val Met Val Ala Glu Tyr Phe Asp Glu Ser Leu Val
                165                 170                 175

Leu Leu Ala Asp Ala Leu Cys Trp Gly Leu Asp Asp Val Val Gly Phe
            180                 185                 190

Met His Asn Ala Gln Ala Gly His Lys Gln Gly Leu Ser Thr Val Ser
        195                 200                 205

Asn Ser Gly Leu Thr Ala Glu Asp Arg Gln Leu Thr Ala Arg Ala Arg
    210                 215                 220

Ala Trp Asn Asn Leu Asp Trp Ala Leu Tyr Val His Phe Asn Arg Ser
225                 230                 235                 240

Leu Trp Ala Arg Ile Glu Lys Tyr Gly Gln Gly Arg Leu Gln Thr Ala
                245                 250                 255

Val Ala Glu Leu Arg Ala Arg Arg Glu Ala Leu Ala Lys His Cys Leu
            260                 265                 270

Val Gly Gly Glu Ala Ser Asp Pro Lys Tyr Ile Thr Asp Arg Arg Phe
        275                 280                 285

Arg Pro Phe Gln Phe Gly Ser Ala Lys Val Leu Gly Tyr Ile Leu Arg
    290                 295                 300

Ser Gly Leu Ser Pro Gln Asp Gln Glu Glu Cys Glu Arg Leu Ala Thr
305                 310                 315                 320

Pro Glu Leu Gln Tyr Lys Asp Lys Leu Asp Ala Lys Gln Phe Pro Pro
                325                 330                 335

Thr Val Ser Leu Pro Leu Lys Thr Ser Arg Pro Leu Ser Pro
            340                 345                 350
```

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<210> 4759
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4759

```
Met Val Ser Cys Phe Thr Gly Val Asp Ser Thr Trp Leu Leu Tyr Ile
  1               5                  10                  15

Val Phe Phe Val Phe Phe Ile Asp Ile Val Val His Ile Phe Arg Ile
             20                  25                  30

His Met Val Phe
         35
```

<210> 4760
<211> 58
<212> PRT
<213> Homo sapiens

<400> 4760
Met Asp Gly His Met Leu Ile Leu Ile Val Phe Lys Ile Ile Lys Tyr
1 5 10 15

Leu Leu Ser Ala Arg His Lys Pro Arg Cys Tyr Glu Tyr Leu Leu Val
20 25 30

Phe Arg Asn Tyr Met Val Leu Gly Pro Arg Pro His Glu Thr Tyr Thr
35 40 45

Gln Val Gly Ser Arg Gln Asp Asn Val Lys
50 55

<210> 4761
<211> 5
<212> PRT
<213> Homo sapiens

<400> 4761
Pro Gly Asn Leu Leu
1 5

<210> 4762
<211> 10
<212> PRT
<213> Homo sapiens

<400> 4762
Met Cys Phe Leu Leu Leu Pro Cys Leu Leu
1 5 10

<210> 4763
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4763
Met Ala Leu Leu Tyr Phe Thr Ser Leu Leu Leu Ile Pro Arg Thr Met
1 5 10 15

Ser Ser Thr Leu Tyr Val Leu Asn Lys Tyr Leu Val Gly Gly
20 25 30

<210> 4764
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4764
Met Gln Cys Gln Leu Leu Cys Leu Val Val Tyr Leu Phe Leu Phe Val
1 5 10 15

Leu Val Met Leu Thr Tyr Val Phe Ser Val
20 25

<210> 4765
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4765
Met His Asn Ser Asn Phe Ala Tyr His Leu Leu Leu Asn Leu Gln
1 5 10 15

<210> 4766
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4766
Met Lys Ala Pro Pro Ser His Trp Ser Leu Trp Leu Ser Phe Cys His
1 5 10 15

Pro Pro Pro Trp Leu Phe Ala Leu Asn Lys Leu Ala Gln Arg Ala Leu
20 25 30

Glu Lys His Phe Ile Pro Ser Ser Tyr Ala Asn Ser Val
35 40 45

<210> 4767
<211> 53
<212> PRT
<213> Homo sapiens

<400> 4767
Met Leu Phe Leu Leu Cys Ser Tyr Phe Ile Cys Val Ser His Ser Phe
1 5 10 15

Val Ser Thr Tyr Tyr Ser Val Tyr Phe Cys Phe Leu Thr Cys Leu His
20 25 30

Ser Val Val Pro Thr Tyr Met Leu Arg Ser Gln Met Asp Tyr Asp Ile
35 40 45

Arg Lys Lys Ala Glu
50

<210> 4768
<211> 4
<212> PRT

<213> Homo sapiens

<400> 4768
Met Glu Thr Asp
1

<210> 4769
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4769
Leu Val Thr Val Ser Ser His Lys Ile
1 5

<210> 4770
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4770
Met Pro Val Thr Pro Phe Ser Ser Phe Phe Cys Ala Ser Met Ile Val
1 5 10 15

Thr Pro Phe Leu Phe Phe Phe Phe Phe Glu Thr Ala Trp Ala Thr Glu
20 25 30

Arg Asp Ser Ile Ser Lys Lys Lys Lys Lys Tyr Ile Tyr Ile
35 40 45

<210> 4771
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4771
Lys Ile Leu Ile Val Leu Leu Trp Leu Val Leu Gln
1 5 10

<210> 4772
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4772
Pro Arg Leu Ala Cys Leu Leu Ser Ser Leu Leu Leu Arg Ile Val Phe
1 5 10 15

Leu Pro His Thr Pro Leu Ala Pro Cys Ser Leu Leu
20 25

<210> 4773
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4773
Met Pro Arg Pro Ser Leu Thr Leu Gly Leu Leu Leu Pro Ser Gln His
1 5 10 15

Leu Cys Ala Asn His Thr Leu Leu Gln His Phe Phe Asn Pro Lys Ile
20 25 30

Ile Ala

<210> 4774
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4774
Met Cys Val Thr Ala Ile Tyr Lys Pro Ile Trp Cys Asn Ser Tyr Pro
1 5 10 15

<210> 4775
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4775
Met Lys Leu Leu Phe Phe Leu Met Arg Asp Val Asn Ser Ile Ser Leu
1 5 10 15

Leu Tyr Leu Ile Thr Cys Leu Pro Cys Phe Cys Val Thr
20 25

<210> 4776
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4776
Met Ala Ser His Gly Gly Phe Asp Leu His Phe Pro Gly Val
1 5 10

<210> 4777
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4777
Met Val Asn Leu Cys Leu Glu Val
1 5

<210> 4778
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4778
Met Lys Glu Ala Phe Arg Trp Ala Leu Phe Ser Met Gln Ala Thr Gly
1 5 10 15

His Val Leu Leu Gly Thr Ser Cys Tyr Leu Gln Gln Leu Leu Asp Ala
20 25 30

Thr Glu Glu Gly Gln Pro Pro Lys Gly Lys Ala Ser Ser Leu Ile Pro
35 40 45

Thr Cys Leu Lys Ile Leu Gln
50 55

<210> 4779
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4779
Ile Pro Leu Thr Met Arg Leu Thr Lys Thr Phe Thr Phe Val Gln Lys
1 5 10 15

Val Lys Lys Lys Lys Thr Trp Leu Arg Lys Arg Arg His Val Thr Ser
20 25 30

Ser Tyr Thr Pro Ile Thr Val Ala Leu Gln Lys Ile Lys Ile Thr Thr
35 40 45

Phe Lys Lys Ile Asn Leu Ile
50 55

<210> 4780
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4780
Met Phe Ser Leu Glu Val Leu Phe Leu Phe Ala Gly
1 5 10

<210> 4781
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4781
Leu Cys Leu Ile Thr Trp Leu Leu Phe Pro Thr Cys Thr Met Thr Lys
1 5 10 15

Met Pro Ser Thr Tyr Leu Ile Gln Pro Phe Gln Tyr Asn Ser Tyr Thr
20 25 30

Cys His Leu Ser Lys Pro Lys Gly Thr Ser Ser
35 40

<210> 4782
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4782
Met Ser Ser Leu Gln Ile Phe Ser Pro Ile Leu Trp Leu Val Ser Ser
1 5 10 15

Leu Cys

<210> 4783
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4783
Met Ile Ala Ala Pro Leu Trp Ser Ala Cys Phe Leu Val Arg Val Pro
1 5 10 15

Ser Xaa Val Ser Leu Gly Ala Pro Ser Ser Leu Ser Ser Ser Xaa Ser
20 25 30

Pro Leu Ala Val Ala Val Val Ala Ala His Ala Pro Gly Ile Pro Leu
35 40 45

Gln His Ser Leu Leu Ser Ser
50 55

<210> 4784
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4784
Met Lys Gln Ile Cys Thr Gly Thr Ile Ala Leu Leu Trp Leu Glu Met
1 5 10 15

Pro Leu Phe Trp Gly Gln Thr Phe Lys Met Pro Leu Cys Leu Pro Val
20 25 30

Arg Ser Pro Lys His
35

<210> 4785
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4785
Met Ile Ile Trp Gly Cys Leu Leu Ile Val Ser Val Cys Val Glu Gly
1 5 10 15

Thr Glu Ser Phe Arg Leu Gly Asn Ser Asn Leu Leu Phe Met Ile Lys
20 25 30

Tyr Lys Ser Arg Met
35

<210> 4786
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4786
Met Phe Val Ile Ser His Val Leu Val Ile Cys Cys Leu Trp Val Trp
1 5 10 15

Thr Glu Phe Val Gly Lys Thr Ile Phe Cys Ile Gly Tyr Ser Ser Gln
20 25 30

Gln Cys Pro Pro Gln Lys Ala Phe Ser Gln Asn Ile
35 40

<210> 4787
<211> 33
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4787
Met Thr Phe Leu Thr Ser Phe Pro Ile Ile Leu His Leu Ala Pro Cys
1 5 10 15

Ser Ser Cys Ser Ser Phe Phe Phe Phe Xaa Leu Phe Gln Ile Cys Xaa
20 25 30

Phe

<210> 4788
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4788
Met Ala Ser Gly Phe Leu Phe Cys Trp Ala Lys Ala Leu Trp Gly Trp
1 5 10 15

Arg Gly Trp Cys Trp Cys Cys Thr Gly Leu Thr Ala Ala Leu Thr Gln
20 25 30

Arg Phe Pro Pro Ser Leu Leu Pro Val Cys Cys Val Asp Leu Phe Leu
35 40 45

Val

<210> 4789
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4789
Cys Met Phe Ile Leu Val Asn Met Ile Val Val Ser Ala Pro Val Ala
1 5 10 15

His Gly Val Leu Pro Arg Ile Cys Asp Ser Val Asn Asp Met Tyr Leu
20 25 30

Asn

<210> 4790
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4790

Met His Val Leu Leu Phe Ser Phe Leu Ile Pro Phe Leu Leu Leu Ser
1 5 10 15

Pro Val Gly Val Thr Cys Asn Ser His Met Leu Glu Arg Gln Xaa Ser
20 25 30

Trp Leu Lys Lys Arg Ser Thr Gln Ala Ser Gln His Val
35 40 45

<210> 4791
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4791
His Val Leu Phe Asp Ala Phe Ser Leu Leu His Cys Phe
1 5 10

<210> 4792
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4792
Met Glu Cys Leu Leu Tyr Arg Thr Ile Cys Leu Phe Tyr Phe Leu Val
1 5 10 15

Arg Phe Leu Phe Ser Xaa Leu Leu Leu Met Lys Leu Phe Leu Pro Ile
20 25 30

Ile Asn Pro Asn Ser Trp Thr Leu Trp Leu Gly Asn Ser Leu Asn Phe
35 40 45

Gln Pro Tyr Gly Ile Ile Val Ser Leu Ser Leu Ser Leu Leu Leu Ser
50 55 60

Leu Phe Ser Ser Ser Pro Tyr Phe Leu Ser Asn Lys Tyr Cys Leu Leu
65 70 75 80

Ile

<210> 4793
<211> 218
<212> PRT
<213> Homo sapiens

<400> 4793
Met Ala Met Phe Glu Gln Met Arg Ala Asn Val Gly Lys Leu Leu Lys
1 5 10 15

```
Gly Ile Asp Arg Tyr Asn Pro Glu Asn Leu Ala Thr Leu Glu Arg Tyr
            20                  25                  30

Val Glu Thr Gln Ala Lys Glu Asn Ala Tyr Asp Leu Glu Ala Asn Leu
        35                  40                  45

Ala Val Leu Lys Leu Tyr Gln Phe Asn Pro Ala Phe Phe Gln Thr Thr
    50                  55                  60

Val Thr Ala Gln Ile Leu Leu Lys Ala Leu Thr Asn Leu Pro His Thr
65                  70                  75                  80

Asp Phe Thr Leu Cys Lys Cys Met Ile Asp Gln Ala His Gln Glu Glu
                85                  90                  95

Arg Pro Ile Arg Gln Ile Leu Tyr Leu Gly Asp Leu Leu Glu Thr Cys
            100                 105                 110

His Phe Gln Ala Phe Trp Gln Ala Leu Asp Glu Asn Met Asp Leu Leu
        115                 120                 125

Glu Gly Ile Thr Gly Phe Glu Asp Ser Val Arg Lys Phe Ile Cys His
    130                 135                 140

Val Val Gly Ile Thr Tyr Gln His Ile Asp Arg Trp Leu Leu Ala Glu
145                 150                 155                 160

Met Leu Gly Asp Leu Ser Asp Ser Gln Leu Lys Val Trp Met Ser Lys
                165                 170                 175

Tyr Gly Trp Ser Ala Asp Glu Ser Gly Gln Ile Phe Ile Cys Ser Gln
            180                 185                 190

Glu Glu Ser Ile Lys Pro Lys Asn Ile Val Glu Lys Ile Asp Phe Asp
        195                 200                 205

Ser Val Ser Ser Ile Met Ala Ser Ser Gln
    210                 215
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<210> 4794
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4794

```
Met Ala Ser Ser Leu Leu Ala Gln Ile Val Leu Gly Gly Trp Leu Phe
  1               5                  10                  15

Val Gly Ala Phe Asn Ile Gln Arg Gly Glu Tyr Cys Ser Asp
            20                  25                  30
```

<210> 4795
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4795
Met Thr Lys Ile Leu Trp Leu Phe Leu Phe Leu Leu
1 5 10

<210> 4796
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4796
Met Phe Gly Val Leu Leu Val Tyr Leu Leu Phe Tyr Thr Phe Ala Thr
1 5 10 15

Ile Ser Leu Val Asn Gly Met Val Trp Gly Phe
20 25

<210> 4797
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4797
Glu Trp Asn Ile Phe Leu Leu Phe Ser Cys Ile Cys Leu Tyr Phe Ser
1 5 10 15

Leu Met Asn Asp Trp Ser
20

<210> 4798
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4798
Arg Pro Leu Trp Gly Leu Gly Lys Arg Ser Leu His
1 5 10

<210> 4799
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4799

Met Lys Ser Asp Leu Gly Pro Glu Leu Gln Xaa Ser Leu Ile Leu Gln
1 5 10 15

Asn Thr Ile Ile Ser Ala Tyr Glu Lys Asp Xaa
20 25

<210> 4800
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4800
Met Trp Pro Cys Met Thr Leu Leu Leu Leu Tyr Phe Leu Phe Pro Phe
1 5 10 15

Gln Met Gly Ile Arg Thr Val Gly Gln Gln Gln Ser Gln Ser Gln
20 25 30

<210> 4801
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4801
Thr Leu Ile Thr Cys Phe Ala Asn Phe Lys Cys Leu Asn Ile Ser Glu
1 5 10 15

Thr Ser Ser Lys Tyr Val Gly Gln Leu Lys Asn Phe Asp Cys
20 25 30

<210> 4802
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4802
Met Pro Leu Leu Phe Phe Ser Val Ser Thr Leu Phe Ser Gly Ser Val
1 5 10 15

Thr Leu Gln Gln Arg Gly Met Phe Leu Pro Trp Thr Gly Thr Gly Asn
20 25 30

Arg Cys Leu Pro Cys Tyr Gly His Gly Leu Asn
35 40

<210> 4803
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4803
Lys Gln Leu Tyr Leu Glu Ser Tyr Cys Leu Gly Phe Leu Ile Arg His
1 5 10 15

Ser Ser Pro Asp
20

<210> 4804
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4804
Leu Arg Pro Arg Ser Pro Gly Leu Ala Gly Arg Gly Cys Leu
1 5 10

<210> 4805
<211> 73
<212> PRT
<213> Homo sapiens

<400> 4805
Met Gly Cys Phe Val Val Val Val Val Phe Val Val Gly His Leu Ser
1 5 10 15

Ile Phe Ser His Gln Phe Cys Ser Leu Leu Ala Met Asp Lys Ile Gly
20 25 30

Ser Phe Trp Leu Ile Lys Lys Asp Asn Phe Ile Lys Trp His Phe Lys
35 40 45

Gln Ala Ile Val Ser Phe Ile Ile Cys Asn Ala His Gly Lys Ala Lys
50 55 60

Thr Phe Val Met Lys Glu Leu Leu Ile
65 70

<210> 4806
<211> 117
<212> PRT
<213> Homo sapiens

<400> 4806
Val Ala Val His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro
1 5 10 15

Asn Ile Glu Ala Val Ser Asn Val His Asn Leu Asn Ser Val Lys Glu
20 25 30

Ser Pro His Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe
35 40 45

Ser Thr Val Ile Gly Thr Leu Leu Phe Leu Ala Glu Val Val Leu Leu
50 55 60

Cys Trp Val Lys Phe Leu Pro Leu Lys Lys Gln Pro Gly Gln Pro Arg
65 70 75 80

```
Pro Thr Ser Lys Pro Pro Ala Ser Gly Ala Gln Pro Thr Ser Ala Pro
                  85                  90                  95

Ala Ala Ser Pro Arg Ala Arg Gln Leu Pro Ser Pro Arg Pro Pro Ser
            100                 105                 110

Trp Cys Pro Ser Ala
        115
```

<210> 4807
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4807
```
Met Ser Asn Glu Arg Phe Arg Phe Arg Ser Leu Thr Phe His Leu Pro
  1               5                  10                  15

Leu Phe Pro Val Val Ala Met Phe Pro Arg Leu Pro Ser Gln Lys Pro
             20                  25                  30

Cys Glu
```

<210> 4808
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4808
```
Met Ala Arg His Ser Thr Ser Thr Cys Phe Arg Arg Ser Trp Trp Arg
  1               5                  10                  15

Thr Trp Cys Leu Ala Ala Gly Trp Ala Pro Pro
             20                  25
```

<210> 4809
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4809
```
Met Val Lys Thr Val Phe Ala His Cys Phe Leu Leu Phe His Leu Val
  1               5                  10                  15

Thr Asn Asp Gln Asp Asp Leu Ile Phe Phe Pro Ser
             20                  25
```

<210> 4810
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4810
Met Cys Pro Arg Leu Leu Phe Ser Trp Ala Phe Leu Ser Arg
1 5 10

<210> 4811
<211> 56
<212> PRT
<213> Homo sapiens

<400> 4811
Met Lys Arg Gly Val Leu Gly Gln Leu Phe Ser Ser Leu His Pro Ile
1 5 10 15

Ser Thr Pro Pro Pro Trp Pro Pro Ala Ser Leu Arg Leu Ile Gln Tyr
20 25 30

Pro Asn Leu Leu Leu Ile Thr Glu Lys Asn Val Lys Lys Glu Glu Lys
35 40 45

Arg Lys Ala Arg Ser Leu Ser Lys
50 55

<210> 4812
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4812
Met Arg Met Leu Arg Glu Ile Val Gly Cys Leu Glu Phe His Tyr Ile
1 5 10 15

Phe Cys Phe Tyr Phe Leu Ile Pro Arg Cys Phe Leu Lys Tyr Ser Asp
20 25 30

Lys Tyr Leu Ser Tyr Ile Asp
35

<210> 4813
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4813
Met Gln Leu Phe Ser Leu Phe Phe Ser Phe Pro Pro Ser Leu His Pro
1 5 10 15

Ser Pro Ile Pro Pro Ser Leu Pro Tyr Ser Ser Arg Leu Pro Pro Ser
20 25 30

Leu Pro Pro Ser
35

<210> 4814

<211> 36
<212> PRT
<213> Homo sapiens

<400> 4814
Met Asp Asn Arg Thr Ala Leu Ser Val Gly Met Val Val Leu Leu Glu
1 5 10 15

Asp Cys Ile Ile Gly Gly Leu Val Ser Ser Ser Leu Pro Gly Gln Ser
20 25 30

Ser Glu Val Leu
35

<210> 4815
<211> 92
<212> PRT
<213> Homo sapiens

<400> 4815
Met Ala Cys Ile Leu Phe Ser Leu Leu Cys Leu Ile Leu Phe Asp Phe
1 5 10 15

Pro Leu Gln His Ser Val Ser Val Lys Gly Phe Tyr Ala Phe Thr Ser
20 25 30

His Val Leu Asn Thr Leu Arg Thr Thr His Leu Val Phe Thr Leu Leu
35 40 45

Pro Val Asn Val Trp Asn Leu Glu Ser His Arg Val Ala Leu Lys Gln
50 55 60

Cys Val Phe Ser Leu Arg Ser Ser Ala His Phe Ala Thr Thr Arg Glu
65 70 75 80

Glu Phe Ser Ala Lys Ala Asn Pro Cys Ser Leu Thr
85 90

<210> 4816
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4816
Glu Arg Cys Leu Leu Ile Leu Cys Val Val Thr Gln Arg Ser Ser Thr
1 5 10 15

Phe Pro Ser Leu Cys Arg
20

<210> 4817
<211> 70
<212> PRT
<213> Homo sapiens

<400> 4817
Met Trp Leu Leu Ile Asn Leu Thr Ala Ser Arg Cys Ser Ser Pro Pro
1 5 10 15

Cys Gln Ala Leu Cys Leu Leu Ile Ala Leu Trp Gly His Ser Leu Ile
20 25 30

Tyr Ser Pro Ala Leu Gly Asn Arg Ser Cys His Tyr Pro Ser Leu Ser
35 40 45

Ala Gln Gly Lys Ile Asn Ala Leu Arg Ile Val Ile Ile Phe Pro Arg
50 55 60

Leu Pro Ser Trp Trp Cys
65 70

<210> 4818
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4818
Ala Arg Val Cys Ser Lys Val Thr Leu Leu Leu Phe Trp Thr Leu Leu
1 5 10 15

Ser Gly Lys Lys Gly Cys Arg Leu Pro Ala Met
20 25

<210> 4819
<211> 350
<212> PRT
<213> Homo sapiens

<400> 4819
Met His Pro Ala Ala Phe Pro Leu Pro Val Val Val Ala Ala Val Leu
1 5 10 15

Trp Gly Ala Ala Pro Thr Arg Gly Leu Ile Arg Ala Thr Ser Asp His
20 25 30

Asn Ala Ser Met Asp Phe Ala Asp Leu Pro Ala Leu Phe Gly Ala Thr
35 40 45

Leu Ser Gln Glu Gly Leu Gln Gly Phe Leu Val Glu Ala His Pro Asp
50 55 60

Asn Ala Cys Ser Pro Ile Ala Pro Pro Pro Pro Ala Pro Val Asn Gly
65 70 75 80

Ser Val Phe Ile Ala Leu Leu Arg Arg Phe Asp Cys Asn Phe Asp Leu
85 90 95

Lys Val Leu Asn Ala Gln Lys Ala Gly Tyr Gly Ala Ala Val Val His
100 105 110

Asn Val Asn Ser Asn Glu Leu Leu Asn Met Val Trp Asn Ser Glu Glu
115 120 125

```
Ile Gln Gln Gln Ile Trp Ile Pro Ser Val Phe Ile Gly Glu Arg Ser
    130                 135                 140

Ser Glu Tyr Leu Arg Ala Leu Phe Val Tyr Glu Lys Gly Ala Arg Val
145                 150                 155                 160

Leu Leu Val Pro Asp Asn Thr Phe Pro Leu Gly Tyr Tyr Leu Ile Pro
                165                 170                 175

Phe Thr Gly Ile Val Gly Leu Leu Val Leu Ala Met Gly Ala Val Met
            180                 185                 190

Ile Ala Arg Cys Ile Gln His Arg Lys Arg Leu Gln Arg Asn Arg Leu
        195                 200                 205

Thr Lys Glu Gln Leu Lys Gln Ile Pro Thr His Asp Tyr Gln Lys Gly
    210                 215                 220

Asp Gln Tyr Asp Val Cys Ala Ile Cys Leu Asp Glu Tyr Glu Asp Gly
225                 230                 235                 240

Asp Lys Leu Arg Val Leu Pro Cys Ala His Ala Tyr His Ser Arg Cys
                245                 250                 255

Val Asp Pro Trp Leu Thr Gln Thr Arg Lys Thr Cys Pro Ile Cys Lys
            260                 265                 270

Gln Pro Val His Arg Gly Pro Gly Asp Glu Asp Gln Glu Glu Glu Thr
        275                 280                 285

Gln Gly Gln Glu Glu Gly Asp Glu Gly Glu Pro Arg Asp His Pro Ala
    290                 295                 300

Ser Glu Arg Thr Pro Leu Leu Gly Ser Ser Pro Thr Leu Pro Thr Ser
305                 310                 315                 320

Phe Gly Ser Leu Ala Pro Ala Pro Leu Val Phe Pro Gly Pro Ser Thr
                325                 330                 335

Asp Pro Pro Leu Ser Pro Pro Ser Ser Pro Val Ile Leu Val
            340                 345                 350
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<210> 4820
<211> 55
<212> PRT
<213> Homo sapiens

<400> 4820

```
Met Tyr Cys Leu Trp Leu Leu Leu Leu Tyr Asn Ser Trp Val Glu Tyr
  1               5                  10                  15

Leu Glu Gln Arg Pro Asn Val Trp Gln Lys Ser Asn Ile Phe Thr Ile
             20                  25                  30

Leu Tyr Arg Lys Lys Met Ser Thr Tyr Ile Tyr Thr Tyr Tyr Asn Phe
         35                  40                  45

Ser Lys Asn Thr Glu Phe Lys
```

50 55

<210> 4821
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4821
Met Thr Val Met Val Thr Leu Leu Phe Leu Leu Arg Tyr Val Thr Ala
1 5 10 15

Leu Arg Leu Thr Arg Ala Thr Trp Ser Cys Trp
20 25

<210> 4822
<211> 71
<212> PRT
<213> Homo sapiens

<400> 4822
Met Ile Met Ser Ser Ser Asn Ser Ser Ile Trp Pro Ala Met Pro Cys
1 5 10 15

Met Leu Leu Ser Val Tyr Ser Tyr Leu Phe Ser Cys Ile Ser His Gly
20 25 30

Ser Pro Arg Leu Ser Ala Leu Gln Pro Pro Lys Pro Cys Ser Ser Phe
35 40 45

Ser Asn Ser Ser Ala Pro Tyr Leu Arg Ala Phe Ala Ser Ala Arg Cys
50 55 60

Thr Ser Phe Pro Tyr Phe Thr
65 70

<210> 4823
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4823
Met Asp Phe Leu Cys Phe Leu Leu Leu Ser Gly Ala Thr Pro Ala Leu
1 5 10 15

Thr Ser Ser Gly Thr Ser Cys Gln His Ser Pro His Ser Leu Met Pro
20 25 30

Gln Ser Cys His Thr Arg Leu Ile Pro Cys Leu Pro Val Cys Leu Gln
35 40 45

Pro Asp Ala Ala Arg Pro Arg Leu Pro
50 55

<210> 4824
<211> 2
<212> PRT
<213> Homo sapiens

<400> 4824
Phe Pro
1

<210> 4825
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4825
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15

Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4826
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4826
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15

Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4827
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4827
Ile Arg Arg Val Leu Trp Ala Pro Gly Gln Pro Ser Cys Leu Ser Ser
1 5 10 15

Pro Ala Val Ser Arg Gly Arg Trp
20

<210> 4828
<211> 54
<212> PRT
<213> Homo sapiens

<400> 4828
Met Cys Gln Thr Trp Ala Arg Cys Leu Arg Leu Met Phe His Pro Thr
1 5 10 15

Cys Leu Thr Cys Pro Ala Leu Pro Thr Thr Ser Cys Thr Leu Pro Thr
20 25 30

Trp Ala Pro Ala Leu Pro Pro Leu Pro Leu Ala Pro Phe Gln Asn Cys
35 40 45

Pro Pro Ser Thr Leu Arg
50

<210> 4829
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4829
Met Leu Pro Gly Val Leu Trp Tyr Leu Ala Arg Cys Arg
1 5 10

<210> 4830
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4830
Met Val Gly Pro Arg Leu Pro Met Gly Leu Leu Phe Val Ala Ser Phe
1 5 10 15

Leu Phe Leu Phe Ile Gln Cys Val His Met Pro Arg Ser Tyr Leu
20 25 30

<210> 4831
<211> 89
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4831
Met Arg Ser Pro His Val Arg Val His Leu Val Tyr Phe Gln Arg Leu
1 5 10 15

```
Ala Arg Gly Ser Asp Glu Arg Thr Cys Ser Ala Pro Ala Phe Ser Ser
             20                  25                  30

Phe Arg Glu Phe Ser Arg Gly Leu Gln Arg Phe Pro His Ala Ala Ser
         35                  40                  45

His Ser Ser Cys Thr Ile Val His Ser Asn Ser Asn Gly Gln Gly Leu
     50                  55                  60

Gln Ser Xaa Arg Ile Xaa Ala Asn Ile Tyr Tyr Phe Met Trp Xaa Phe
 65                  70                  75                  80

Phe Leu Phe Phe Phe Phe Phe Phe Phe
                 85
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<210> 4832
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4832
Val Lys Thr Ser His Val Phe Glu Ser Glu Asn
  1               5                  10
```

```
<210> 4833
<211> 91
<212> PRT
<213> Homo sapiens

<400> 4833
Met Asn Lys Ser Thr Phe Leu Phe Leu Ile Ile Met Trp Pro Asn Val
  1               5                  10                  15

Tyr Ile Ser Leu Ser Val Ala His His Ile Val Leu Thr Lys Thr Ile
             20                  25                  30

Ser Ser Phe Thr Pro Ala Gln Ile Phe Lys Tyr Ser Leu Leu Phe Pro
         35                  40                  45

Thr Ser Val Ser Gly Ile Ala Ile Leu Phe Lys Thr Tyr Leu Lys Asn
     50                  55                  60

Val Gln Ala Ser His Leu Cys Val Lys Leu Phe Ser Leu Phe Gln Cys
 65                  70                  75                  80

Asp Glu Lys Asn Trp Thr Glu His Thr Phe Leu
                 85                  90
```

```
<210> 4834
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4834
Met Tyr Met Leu Val Cys Ile Cys Val Phe Ile Leu Asn Ser Tyr Ile
```

1 5 10 15

Cys Cys Ile Tyr Leu Val Leu Ser Met Leu Tyr Asp Ser Thr Thr Ser
20 25 30

Lys Met Asp Gln Val
35

<210> 4835
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4835
Leu Cys Leu Met Cys Trp Trp Leu Pro Gly Gly Leu Ala Ser Asp Ser
1 5 10 15

Glu Glu Asp Thr Lys Lys Leu Ile Val Ser Leu Asn Trp Leu Phe Tyr
20 25 30

Leu Leu Arg Leu Cys Leu Ser Tyr
35 40

<210> 4836
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4836
Met His Leu Cys Cys Asn Leu Cys Trp Tyr Ala Leu Asp Leu Val Phe
1 5 10 15

Pro Trp Phe Phe Ala Ala Val Ser Gln Val Ala Arg Phe Asp Ile Ser
20 25 30

Leu Ser Leu Ile
35

<210> 4837
<211> 2
<212> PRT
<213> Homo sapiens

<400> 4837
Ser Leu
1

<210> 4838
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4838

Met Gly Met Ser Ser Pro Ala Phe Gln Lys Gln Lys Glu Gly Gln Ser
1 5 10 15

Asp Leu Leu Val Pro Ala Phe Cys Phe Cys Phe Cys Phe Cys Phe
20 25 30

<210> 4839
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4839
Met Cys Ile Phe Leu Val Ser Thr Ser Thr Leu Leu Ala Leu Pro
1 5 10 15

<210> 4840
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4840
Met Ile Ser Val His Leu
1 5

<210> 4841
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4841
Met Cys Leu Leu Ile Val Thr Pro Gly Ile Gly Phe Leu Xaa Phe Ile
1 5 10 15

Val Arg Ile Gly Gly Ser Gly Asp Thr Xaa Xaa Val Glu Trp Arg Arg
20 25 30

Lys Asp Leu Leu Ile Ile Arg Glu Glu His Val Gly
35 40

<210> 4842
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4842
Lys Glu Leu Leu Ile Ser Leu Val Ala Ser Leu Phe Met Gly Phe Gly
1 5 10 15

Val Leu Phe Leu Leu Leu Trp Val Gly Ile Tyr Val
20 25

<210> 4843
<211> 25
<212> PRT
<213> Homo sapiens

<400> 4843
Met Lys Ser Cys Leu Trp Phe Leu Thr Ser Leu Ser Arg Val Ser Ala
1 5 10 15

Ser Leu Gly Glu Leu His Ile Ser Ser
20 25

<210> 4844
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4844
Met Phe Gln Trp Phe Phe Leu Phe Val Val Phe Val Phe Val Leu Pro
1 5 10 15

Phe Ser Phe Thr Gly Leu Phe
20

<210> 4845
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4845
Met Cys Leu Cys Val Cys Val Cys Val Cys Ala Arg Ala Cys Ala Leu
1 5 10 15

Val Ala

<210> 4846
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4846
Met Phe Ser Cys Phe Phe Leu Leu Pro Met Phe Cys Ile Leu Thr Pro
1 5 10 15

Leu Leu Ser Gly Ile
20

<210> 4847
<211> 26
<212> PRT
<213> Homo sapiens

<400> 4847
Met Gln Cys Val Tyr His Ser Ile Trp Tyr Thr Ala Met Val Ile Pro
1 5 10 15

Phe Leu Phe Ser Phe Gln Ile Ile Ala Pro
20 25

<210> 4848
<211> 5
<212> PRT
<213> Homo sapiens

<400> 4848
Met Asn Asn Asp Cys
1 5

<210> 4849
<211> 92
<212> PRT
<213> Homo sapiens

<400> 4849
Val Gly Ser Pro Thr Arg Gln Ile Ala Thr Leu Leu Cys Leu Ala Leu
1 5 10 15

Trp Ile Leu Pro Leu Leu Phe Leu Pro Ser Leu Cys Leu Trp Leu Tyr
20 25 30

Pro Ser Pro Pro Ser Ile Ser Leu Ser Leu Val Ser Leu Leu Ser Leu
35 40 45

Asp His Val Phe Phe Ile Ser Met Tyr Leu Pro Leu Val Met Cys Ala
50 55 60

Ser Tyr Leu Lys Val Cys Pro Ser Phe Ile Ser Phe Val Asn Leu Gly
65 70 75 80

Asn Tyr Met Ser Ile Pro Gly Leu Phe Trp Ile Glu
85 90

<210> 4850
<211> 9
<212> PRT
<213> Homo sapiens

<400> 4850
Phe Cys Thr His Ala Phe Thr Ser Glu
1 5

<210> 4851
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4851
Met Cys Pro Ser Ala Leu His Thr Phe Thr Pro Ala Met Xaa Ser Cys
1 5 10 15

Ala Ala Tyr Leu Gly Xaa Pro Thr Gln Cys Ser Thr Ser Xaa Pro Ala
20 25 30

Pro Leu Lys Thr Gln Ser His Met Asn Leu Ala Phe Xaa Phe Ser Asn
35 40 45

Ile Xaa Thr Ser Val Leu Leu Val Pro Thr Ser Pro Ser Pro Ala Trp
50 55 60

Arg Lys Gly Tyr Phe Gln Gly Thr Thr Val Val Gln Leu Ser Gln Val
65 70 75 80

Phe Leu Leu Ser Ile Asn His Pro Ala Ala Leu Gly Cys Pro Ala Ser
85 90 95

Gln Pro Ser Gly

100

<210> 4852
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4852
Met Ala Lys Lys Val Pro Val Tyr Leu Met Pro Ser Phe Pro Cys Cys
1 5 10 15

<210> 4853
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4853
Val Ala Thr Val Ser Gly Glu Gln Asn Arg Thr Thr Val Ile Leu Gly
1 5 10 15

<210> 4854
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4854
Gln Gln Arg Leu Pro Trp Lys Ser Thr Thr Phe Pro Phe Phe Met Gly
1 5 10 15

Leu Ser Ser Leu Trp Glu Ser Leu Glu Ile Pro Leu Leu Phe Thr Ala
20 25 30

Thr Ser Ser Leu
35

<210> 4855
<211> 1
<212> PRT
<213> Homo sapiens

<400> 4855
Gly
1

<210> 4856

<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4856
Leu Phe Ser Cys Cys Leu Phe Xaa Xaa Xaa Val Leu Lys Pro Cys Leu
1 5 10 15

Gly His Pro Thr Gly Glu Leu Gly His His Leu Ala Leu Trp Trp Gln
20 25 30

Trp Gly

<210> 4857
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4857
Leu Leu Leu Leu Leu Ala Val Val Gly Thr Arg Trp Leu Leu Pro Ala
1 5 10 15

Ala Ala Ala Ala Tyr Pro Pro Pro Asp Trp Ser Arg Trp Pro Trp Ala
20 25 30

Ser Ser Pro Pro Pro Pro Trp Leu Cys Pro Pro Ala Ala Pro Gly Ser
35 40 45

His Arg Gly Arg
50

<210> 4858
<211> 57
<212> PRT
<213> Homo sapiens

<400> 4858
Met Ile Pro Met Arg Lys Val Asn Thr Ser Leu Trp Phe Ser Leu Cys
1 5 10 15

Leu Leu Gln Leu Thr Leu Gln Ile Trp Lys Gln Tyr Gly Arg Arg Gln

20 25 30

Asn Arg Lys Thr Leu Trp Ile Gln Asn Leu Asp Val Cys Leu Asn Cys
35 40 45

Gln Gln Arg Met Ile Asn His Met Met
50 55

<210> 4859
<211> 47
<212> PRT
<213> Homo sapiens

<400> 4859
Met Asn Glu Asn Leu Phe Ala Ser Phe Ile Ala Pro Thr Ile Leu Gly
1 5 10 15

Leu Pro Ala Ala Val Leu Ile Ile Leu Phe Pro Pro Leu Leu Ile Pro
20 25 30

Thr Ser Lys Tyr Leu Ile Asn Asn Arg Leu Ile Thr Thr Gln Gln
35 40 45

<210> 4860
<211> 79
<212> PRT
<213> Homo sapiens

<400> 4860
Met Gly Leu Arg Pro Pro Gln Ala Gln Met Pro Pro Pro Met Pro Ala
1 5 10 15

Leu Gly Ser Ser Gly Pro His Pro Pro Val Pro Pro Thr His Pro Asn
20 25 30

Met Glu Gly Leu Cys Leu Pro Arg Ala Cys Leu Ser Gly Ala Cys Arg
35 40 45

Thr Leu Pro Glu Thr Leu Arg Thr Ala Pro Arg Lys Ser Ser Leu Met
50 55 60

Pro Thr Lys Ala Ser Arg Thr Val Arg Arg Ser Ser Pro Arg Arg
65 70 75

<210> 4861
<211> 63
<212> PRT
<213> Homo sapiens

<400> 4861
Met Ala Phe Ile Leu Leu Phe Tyr Cys Leu Met Thr Phe Leu Ser Leu
1 5 10 15

Glu Gln Asn Ser Ala Thr Val Glu Pro Ser Ser His Glu Ile Leu His
20 25 30

```
Leu Leu Gln Asn Cys Phe Glu Leu Leu Arg Thr Ser Thr Ser Gln Cys
          35                  40                  45

Thr Glu Gly Ile Pro Cys Gln Arg Tyr Gln Asn Gly Leu His Ile
     50                  55                  60
```

<210> 4862
<211> 168
<212> PRT
<213> Homo sapiens

<400> 4862

```
Met Ser Gly Leu Ser Gly Pro Pro Ala Arg Arg Gly Pro Phe Pro Leu
  1               5                  10                  15

Ala Leu Pro Ala Gln His Leu Lys Ile Thr Asp Ser Ala Gly His Ile
             20                  25                  30

Leu Tyr Ser Lys Glu Asp Ala Thr Lys Gly Lys Phe Ala Phe Thr Thr
          35                  40                  45

Glu Asp Tyr Asp Met Phe Glu Val Cys Phe Glu Ser Lys Gly Thr Gly
     50                  55                  60

Arg Ile Pro Asp Gln Leu Val Ile Leu Asp Met Lys His Gly Val Glu
 65                  70                  75                  80

Ala Lys Asn Tyr Glu Glu Ile Ala Lys Val Glu Lys Leu Lys Pro Leu
                 85                  90                  95

Glu Val Glu Leu Arg Arg Leu Glu Asp Leu Ser Glu Ser Ile Val Asn
            100                 105                 110

Asp Phe Ala Tyr Met Lys Lys Arg Glu Glu Glu Met Arg Asp Thr Asn
        115                 120                 125

Glu Ser Thr Asn Thr Arg Val Leu Tyr Phe Ser Ile Phe Ser Met Phe
    130                 135                 140

Cys Leu Ile Gly Leu Ala Thr Trp Gln Val Phe Tyr Leu Arg Arg Phe
145                 150                 155                 160

Phe Lys Ala Lys Lys Leu Ile Glu
                165
```

<210> 4863
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4863

```
Met Tyr Val Cys Val Trp Leu Ile Phe Thr Ser Lys Phe Leu Arg Phe
  1               5                  10                  15

Met Leu Leu Cys Val Ser Glu Val Ser Phe Tyr Leu Leu Leu Ser Ser
             20                  25                  30
```

Ile His Leu
35

<210> 4864
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4864
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15

Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30

Ser Gly Asn
35

<210> 4865
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4865
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15

Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30

Ser Gly Asn
35

<210> 4866
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4866
Met Trp Cys Ala Leu Gly Phe Trp Gly Arg Ala Trp Gly Ser Arg Gly
1 5 10 15

Pro Trp Ala Ala Gln Pro Gly Glu Pro Gln Pro Arg Gly Trp Ser Cys
20 25 30

Ser Gly Asn
35

<210> 4867
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4867
Met Tyr Arg Ala Val Ser Leu Pro Gly Ala Met Gly Trp Ala Cys Pro
1 5 10 15

Ala Val Met Ala Pro Cys Phe Leu Leu Leu Gly Ala Gly Ser Arg Thr
20 25 30

Leu Pro Thr Ile His Ala Val Ala Pro Arg Ala Glu Pro Leu Leu Val
35 40 45

Leu Trp Gln Pro
50

<210> 4868
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4868
Met Pro Ala Asn Val Gln Met Gln Leu Val Asp Thr Lys Ala Gly
1 5 10 15

<210> 4869
<211> 18
<212> PRT
<213> Homo sapiens

<400> 4869
Met Ser Val Thr Ser Ala Trp Cys Gly Val Trp Ile Ile Tyr Arg Ile
1 5 10 15

Ile Lys

<210> 4870
<211> 215
<212> PRT
<213> Homo sapiens

<400> 4870
Asp Ala Val Leu Ala Trp Trp Leu Cys Leu Glu Trp Gln His Leu His
1 5 10 15

Val Gln Leu Ala Pro Ser Ala Tyr Gly Cys Trp His Gly Gly Ile Leu
20 25 30

Trp Arg Cys Val Thr Gly Val Pro Pro Ala Pro Val Val Gly Gly Ala
35 40 45

Gln Thr Ala Leu Glu Thr Pro Pro Cys Ser Ala Ala Pro Asp Gly Leu
50 55 60

Arg Pro His Cys Cys Gly Ala Gly Cys Cys Leu Tyr Val Ser Gln Pro
65 70 75 80

```
Trp Lys Asp Cys Gln Pro Leu Leu Pro Ser Gln Leu Ala Gly His His
                 85                  90                  95

His Cys Leu Pro Leu Arg Leu Pro Val Val Pro Gly Leu Cys Cys Leu
            100                 105                 110

Pro Pro Ala Leu Gly Val His Val Ala Ala Gln Leu Leu Lys Pro Ile
        115                 120                 125

His Val Phe Phe Gly Ala Ala Ile Leu Ser Leu Ser Ile Ala Ser Val
    130                 135                 140

Ile Ser Gly Ile Asn Glu Lys Leu Phe Phe Ser Leu Lys Asn Thr Thr
145                 150                 155                 160

Arg Pro Tyr His Ser Leu Pro Ser Glu Ala Val Phe Ala Asn Ser Thr
                165                 170                 175

Gly Met Leu Val Val Ala Phe Gly Leu Leu Val Leu Tyr Ile Leu Leu
            180                 185                 190

Ala Ser Ser Trp Lys Arg Pro Glu Pro Gly Ile Leu Thr Asp Arg Gln
        195                 200                 205

Pro Leu Leu His Asp Gly Glu
    210                 215
```

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<210> 4871
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4871
```
Met Pro Ala Arg Val Cys Phe Cys Ala Ala Ala Gln Gly Gly Ala Ala
  1               5                  10                  15

Ala Ala His Cys Ala Ala Gly Thr Gln Glu Trp Gly Val Ala Pro Ala
            20                  25                  30

Gly Arg Arg Val Pro Arg Asp
        35
```

<210> 4872
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4872
```
Met Ser Gln Tyr Cys Phe Leu Leu Ala Gly Val Leu Ser Ser Leu Leu
  1               5                  10                  15

Thr Pro Ala Thr Lys Ala Asp Phe
            20
```

<210> 4873
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4873
Ile Ser Arg Arg Cys Ile Leu Phe Asp Asn Ser Phe Ser Tyr Arg Leu
1 5 10 15

Pro Leu Gln Thr Thr
20

<210> 4874
<211> 200
<212> PRT
<213> Homo sapiens

<400> 4874
Met His Ser Leu Val Leu Leu Cys Pro Leu Cys Ser Asp Pro Cys Gly
1 5 10 15

Val Cys Val Ala Pro Lys His Ser His Ser Gln Gly Gln Gln Pro Asp
20 25 30

Ser Glu Leu His Pro Pro Cys Leu Pro His Thr Leu Leu Ser Leu Phe
35 40 45

Leu Ala Leu His Arg Pro Pro Gln Pro Cys His Leu Pro Pro Leu Thr
50 55 60

Asp His Leu Cys Ser Cys Val His Ser Gly Cys Val Phe Cys Arg Ala
65 70 75 80

Phe Gln Ala Ile Arg Pro Glu Ser Arg Ile Arg Lys Trp Met Gly Pro
85 90 95

Gln Lys Thr Asn Ser Val Val Phe Leu Cys Ser Phe Thr Gln Val Thr
100 105 110

Leu Cys Gly Ile Trp Leu Gly Thr Glu Pro Pro Phe Val Asn Lys Asp
115 120 125

Pro Gln Phe Met Pro Gly Tyr Ile Ile Ile Gln Cys Asn Glu Gly Ser
130 135 140

Val Thr Ala Phe Tyr Ser Val Leu Gly Tyr Leu Gly Phe Leu Val Leu
145 150 155 160

Gly Ser Leu Ala Val Ala Phe Leu Ala Arg Asn Leu Pro Asp Ala Phe
165 170 175

Asn Glu Ala Lys Phe Leu Thr Phe Ser Met Leu Val Ser Cys Ser Val
180 185 190

Trp Val Ala Phe Leu Pro Ser Tyr
195 200

<210> 4875
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4875
Met Leu Cys Asn Leu His Phe Leu Tyr Phe Trp His Phe Phe Ala Asn
1 5 10 15

Gly Thr Cys Asn Ser Thr Leu Gln Ile Ala Arg Val Val Ser Ser Leu
20 25 30

Thr Pro Ser Gln Asn Thr Ala Phe Ile Val Val Ser Leu Ser Arg Glu
35 40 45

Leu Gly Tyr
50

<210> 4876
<211> 54
<212> PRT
<213> Homo sapiens

<400> 4876
Asp Leu His Phe Thr Leu Ala Cys Ser Val Leu Phe Val Trp Ala Tyr
1 5 10 15

Ser Ser Arg Arg Asn Leu Pro Glu Val Pro Ser Val Thr Asn Ser Ala
20 25 30

Leu Ser Met Glu Ser Cys Tyr Cys Gln Thr Gly Gly Leu Arg Asp Met
35 40 45

Leu Phe Ser Ala Thr Ser
50

<210> 4877
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4877
Met Phe Val Thr Pro Pro Arg Leu Thr Phe Asn Leu Phe Thr Leu Arg
1 5 10 15

Ser Trp Phe Tyr Val Cys Asp Cys Leu Leu Ser Leu Leu Leu Ser Pro
20 25 30

Ser Gly Arg
35

<210> 4878
<211> 54
<212> PRT
<213> Homo sapiens

<400> 4878
Met Ser Phe Tyr Arg Leu Val His Ser Asn Gln Asp Leu Asn Ser Leu
1 5 10 15

Arg Gly Leu Leu Met Glu Phe Val Phe Leu Phe His Leu Phe Gln Ser
20 25 30

Lys Ala Val Phe Pro Ser Phe Ser Phe Pro Cys Cys Cys Leu Val Glu
35 40 45

Ile Gln Ser Ser Ile Gln
50

<210> 4879
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4879
Met Pro Ile Pro Phe Pro Gly Glu Gln Val His Leu Pro Phe Leu Ser
1 5 10 15

Leu Leu Ala His Trp His Gln Thr Gln Leu Pro Ser Lys Gly Pro Leu
20 25 30

Ala Ser Arg Ala Gln Ile Gln Pro Phe Ser Gln Glu Pro Leu Gly His
35 40 45

Leu Ala Xaa Thr Gln Leu Thr Ser Gln Gly Pro Leu Ala Cys Arg Val
50 55 60

Gln Val Gln Leu Pro Ser Gln Gly Leu Leu Ala His
65 70 75

<210> 4880
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4880
Met Ile His Ser Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu Leu
1 5 10 15

Ile Leu Leu Arg Ile Ser Ile Ser Arg Leu Thr Gly Thr Asn Thr Leu
20 25 30

Val Phe Asn Leu Ile Leu
35

<210> 4881
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4881
Met Gln Glu Ala Arg Gln Gln Ile Thr Thr Val Val Leu Pro Thr Leu
1 5 10 15

Ala Val Val Val Leu Leu Ile Val Val Phe Val Tyr Val Ala Thr Arg
20 25 30

Pro Thr Ile Thr Glu
35

<210> 4882
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4882
Met Thr His Tyr Val Phe Leu Leu Leu Phe Met Val Gly Arg Gly Asp
1 5 10 15

Glu Gly Lys Ser Gly
20

<210> 4883
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4883
Met Glu Glu Val Lys Pro Ala Ser Trp Trp Val Leu Val Ser Tyr Gly
1 5 10 15

Val Leu Leu Val Thr Leu Gly Ala Phe Ile Phe Gly Gln Thr Thr Ala
20 25 30

Asn Ala Ile Phe Val Asp Leu Leu Ala
35 40

<210> 4884
<211> 53
<212> PRT
<213> Homo sapiens

<400> 4884
Met Ser Asn Leu Ser Leu Arg Tyr Ser Ser Ser Lys Gly Ser Trp Gly
1 5 10 15

Ser Leu Phe Pro Asn Ile Arg Ile Met Gln Ile Phe Leu Leu Met Val
20 25 30

Asp Ala His Cys Val Tyr Ile Ser Gln Pro Phe Lys His Glu Ser Glu

```
         35                  40                  45

Lys Ser Phe Ser Lys
     50
```

<210> 4885
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4885

```
Met Trp Leu Ser Arg Glu Val Leu Val Leu Ile Ser Ile Ser Ala Ser
  1               5                  10                  15

Gly
```

<210> 4886
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4886

```
Met Asn Pro Cys Phe Phe Ser Val Leu Val Leu Leu Pro Glu Leu Ala
  1               5                  10                  15

Leu Gln Trp Lys
             20
```

<210> 4887
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4887

```
Met Leu Leu Cys Phe Met Arg Ile Lys Ile Pro Ala Leu Leu Cys Leu
  1               5                  10                  15

Trp Tyr Leu Pro Leu His Ile Leu Val Met Ala Trp Glu Val
             20                  25                  30
```

<210> 4888
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4888

```
Met Pro Leu Leu Leu Arg Trp Val Ser Trp Leu Gln Val Trp Lys Pro
  1               5                  10                  15

Arg Pro Pro Leu Ser Arg Arg Arg Lys Thr Ser Gln Leu Lys Pro Arg
             20                  25                  30
```

Ser

<210> 4889
<211> 233
<212> PRT
<213> Homo sapiens

<400> 4889
Glu Ile Leu Glu Arg Pro Ala Gln Leu Ala Asn Ala Arg Glu Thr Pro
1 5 10 15

His Ser Pro Gly Val Glu Asp Ala Pro Ile Ala Lys Val Gly Val Leu
20 25 30

Ala Ala Ser Met Glu Ala Lys Ala Ser Ser Gln Gln Glu Lys Glu Asp
35 40 45

Lys Pro Ala Glu Thr Lys Lys Leu Arg Ile Ala Trp Pro Pro Pro Thr
50 55 60

Glu Leu Gly Ser Ser Gly Ser Ala Leu Glu Glu Gly Ile Lys Met Ser
65 70 75 80

Lys Pro Lys Trp Pro Pro Glu Asp Glu Ile Ser Lys Pro Glu Val Pro
85 90 95

Glu Asp Val Asp Leu Asp Leu Lys Lys Leu Arg Arg Ser Ser Ser Leu
100 105 110

Lys Glu Arg Ser Arg Pro Phe Thr Val Ala Ala Ser Phe Gln Ser Thr
115 120 125

Ser Val Lys Ser Pro Lys Thr Val Ser Pro Pro Ile Arg Lys Gly Trp
130 135 140

Ser Met Ser Glu Gln Ser Glu Glu Ser Val Gly Gly Arg Val Ala Glu
145 150 155 160

Arg Lys Gln Val Glu Asn Ala Lys Ala Ser Lys Lys Asn Gly Asn Val
165 170 175

Gly Lys Thr Thr Trp Gln Asn Lys Glu Ser Lys Gly Glu Thr Gly Lys
180 185 190

Arg Ser Lys Glu Gly His Ser Leu Glu Met Glu Asn Glu Asn Leu Val
195 200 205

Glu Asn Gly Ala Asp Ser Asp Glu Asp Asp Asn Ser Phe Leu Lys Gln
210 215 220

Gln Ser Pro Pro Arg Asn Pro Ser Leu
225 230

<210> 4890
<211> 49
<212> PRT

<213> Homo sapiens

<400> 4890
Met His Leu Phe Ile Cys Thr Leu Trp Asn Ile Phe Cys Asn Lys Pro
1 5 10 15

Val Ser Trp Ser Ser Val Ser Cys Ser Asn Lys Phe Ile Lys Pro Lys
20 25 30

Glu Gly Val Val Gly Ile Pro Ile Tyr Arg Arg Leu Val Arg Ser Thr
35 40 45

Ser

<210> 4891
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4891
Met Ile Leu Ser Thr Asn Leu Phe Thr Asp Leu Phe Ile Leu Phe Leu
1 5 10 15

Val Leu His Ser
20

<210> 4892
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4892
Met Ala His Pro Asn Arg Ile Leu Leu Val Pro Trp
1 5 10

<210> 4893
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4893
Met Thr Lys Ile Val Asn Thr Ser Leu Phe Leu Ala Ser Val Thr Ile
1 5 10 15

Ile Val Ser Ala Thr Ser Gly Val Glu Gln Pro Ser Thr Gln Arg Ser
20 25 30

Leu Ala Phe
35

<210> 4894
<211> 66

<212> PRT
<213> Homo sapiens

<400> 4894
Met Phe Leu Cys Gly Phe Phe Val Val Val Phe Val Trp Gly Gly Gly
1 5 10 15

Lys Tyr Arg Val Ile His Glu Gln Asp Ile Ser Leu Leu Ser Lys Ser
20 25 30

Leu Gly Ser Arg Cys Gly Ser Glu Met Ala Trp Glu Gly Pro Cys Gly
35 40 45

Gln Trp Phe Tyr Leu Phe Phe Leu Ser Leu Leu Ile Ser Gly Leu Leu
50 55 60

Arg Phe
65

<210> 4895
<211> 30
<212> PRT
<213> Homo sapiens

<400> 4895
Met Leu Ser Ser Val Met Leu Leu Ser Val Leu Gln Val His Leu His
1 5 10 15

Leu Arg Ala Glu Leu His Leu Leu Pro Leu Pro Leu Gln Arg
20 25 30

<210> 4896
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4896
Val Asn Leu Asp His Leu Val Lys Val Val Phe Ala Arg Phe Leu His
1 5 10 15

Tyr Lys Val Asn Ile Phe Pro Phe Pro Tyr Tyr Phe Leu
20 25

<210> 4897
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4897
Met Cys Glu Ala Arg Gln Leu Leu Val Leu Gln Leu Leu Cys Gly Lys
1 5 10 15

Gln Lys Pro Phe Cys Ser Val Pro Gln Pro Ala Phe Val Ser Arg Ile
20 25 30

Glu Glu Leu Phe His Lys
35

<210> 4898
<211> 17
<212> PRT
<213> Homo sapiens

<400> 4898
Met Lys Ile Arg Lys Arg Arg Asn Trp Ala Ser Trp Arg Ile Ser Val
1 5 10 15

Val

<210> 4899
<211> 24
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4899
Met Val Ile Ile Phe Ile Leu Tyr Ile Leu Cys Ile Pro Val Ile Lys
1 5 10 15

Cys Arg Val Leu Xaa Ser Ile Ile
20

<210> 4900
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4900
Ile Val Leu Trp Leu Gln
1 5

<210> 4901
<211> 41
<212> PRT
<213> Homo sapiens

<400> 4901
Met Glu Ile Ser Ala Val Thr Leu Gly Leu Leu Ile Arg Ser Val Trp
1 5 10 15

Gly Gly Ala Gln Glu Ser Ala Phe Leu Ile Arg Ser Pro Ala Pro Leu
20 25 30

Pro His Tyr Ser Ser Ala Lys Arg Ser
35 40

<210> 4902
<211> 29
<212> PRT
<213> Homo sapiens

<400> 4902
Met Ala Val Gly Leu Val Val Phe Phe Thr Thr Phe Leu Thr Pro Ala
1 5 10 15

Ala Tyr Val Leu Gly Asn Leu Lys Gln Phe Arg Arg Asn
20 25

<210> 4903
<211> 11
<212> PRT
<213> Homo sapiens

<400> 4903
Met Gly Lys Arg His Arg Gly Lys Arg Met Val
1 5 10

<210> 4904
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4904
Met Lys Glu Glu Leu Trp Ser Val Phe Arg Trp Val Ile Ile Leu Leu
1 5 10 15

Gln Cys Arg Ile Leu Met Leu Pro
20

<210> 4905
<211> 40
<212> PRT
<213> Homo sapiens

<400> 4905
Met Ile Val Leu Gly Trp Met Phe Phe Val Gly Leu Val Cys Tyr Met
1 5 10 15

Gly Thr Phe Pro Glu Leu Met Glu Pro Cys Gly Arg Asp Ile Asn Ile
20 25 30

Pro Gln Glu Gly Leu Gln Trp Lys
35 40

<210> 4906
<211> 17
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4906
Met Leu Ser Gly Trp Leu Phe Trp Leu Leu Trp Xaa Ser Cys Ile Ser
1 5 10 15

Arg

<210> 4907
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4907
Met Phe Leu Ala Val Leu Leu Leu Ile Leu Met Leu Phe Leu Ile Leu
1 5 10 15

Val Tyr His Gln Val Tyr Ile Ser His Gly Glu Lys Lys Ile Gly Leu
20 25 30

Met Tyr Gln Gly Pro
35

<210> 4908
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4908
Met Val Glu Asp Gln Glu Met His Leu Thr Ser Ser Val Met Pro Asp
1 5 10 15

Met Val Ser His Phe Gly Phe Leu Gly Ala Ile Gly Trp Glu Lys Pro
20 25 30

Glu

<210> 4909
<211> 44
<212> PRT
<213> Homo sapiens

<400> 4909
Met Phe Phe Gly Leu Leu Leu Met Ile Leu Phe Thr Leu Cys Gln Ile
1 5 10 15

Leu Ser Cys Arg Leu Phe Tyr Asn Ser Thr Phe Lys Lys Asn Val Tyr
20 25 30

Ala Asn Leu Leu Ser Ile Phe Met Ser Ile Phe Ile
35 40

<210> 4910
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4910
Met Phe Cys Val Val Val Leu Ser Leu Glu Ala Thr Gly Tyr Gly Arg
1 5 10 15

Phe Thr Phe Thr Gly Gly Pro Leu Met Thr Thr Ala Pro Ser Thr
20 25 30

<210> 4911
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4911
Met Ser Trp Cys Leu Asp Leu Arg Thr Thr Gln Arg Thr Leu Thr Ile
1 5 10 15

Pro Ala Leu Val His Thr Thr Gln Arg Arg Ser His Arg Gln Lys Leu
20 25 30

Pro Gly Gln
35

<210> 4912
<211> 322
<212> PRT
<213> Homo sapiens

<400> 4912
Met Glu Ala Ser Ala Ala Ala Val Phe Ser His Phe Ile Met Lys Phe
1 5 10 15

Pro Trp Gln Trp Ala Phe Leu Leu Gly Phe Val Leu Gly Ala Val Ser
20 25 30

Pro Ala Val Val Val Pro Tyr Met Met Val Leu Gln Glu Asn Gly Tyr
35 40 45

Gly Val Glu Glu Gly Ile Pro Thr Leu Leu Met Ala Ala Ser Ser Met
50 55 60

Asp Asp Ile Leu Ala Ile Thr Gly Phe Asn Thr Cys Leu Ser Ile Val
65 70 75 80

```
Phe Ser Ser Gly Gly Ile Leu Asn Asn Ala Ile Ala Ser Ile Arg Asn
                  85                  90                  95

Val Cys Ile Ser Leu Leu Ala Gly Ile Val Leu Gly Phe Phe Val Arg
             100                 105                 110

Tyr Phe Pro Ser Glu Asp Gln Lys Lys Leu Thr Leu Lys Arg Gly Phe
         115                 120                 125

Leu Val Leu Thr Met Cys Val Ser Ala Val Leu Gly Ser Gln Arg Ile
     130                 135                 140

Gly Leu His Gly Ser Gly Gly Leu Cys Thr Leu Val Leu Ser Phe Ile
145                 150                 155                 160

Ala Gly Thr Lys Trp Ser Gln Glu Lys Met Lys Val Gln Lys Ile Ile
                 165                 170                 175

Thr Thr Val Trp Asp Ile Phe Gln Pro Leu Leu Phe Gly Leu Val Gly
             180                 185                 190

Ala Glu Val Ser Val Ser Ser Leu Glu Ser Asn Ile Val Gly Ile Ser
         195                 200                 205

Val Ala Thr Leu Ser Leu Ala Leu Cys Val Arg Ile Leu Thr Thr Tyr
     210                 215                 220

Leu Leu Met Cys Phe Ala Gly Phe Ser Phe Lys Glu Lys Ile Phe Ile
225                 230                 235                 240

Ala Leu Ala Trp Met Pro Lys Ala Thr Val Gln Ala Val Leu Gly Pro
                 245                 250                 255

Leu Ala Leu Glu Thr Ala Arg Val Ser Ala Pro His Leu Glu Pro Tyr
             260                 265                 270

Ala Lys Asp Val Met Thr Val Ala Phe Leu Ala Ile Leu Ile Thr Ala
         275                 280                 285

Pro Asn Gly Ala Leu Leu Met Gly Ile Leu Gly Pro Lys Met Leu Thr
     290                 295                 300

Arg His Tyr Asp Pro Ser Lys Ile Lys Leu Gln Leu Ser Thr Leu Glu
305                 310                 315                 320

His His
```

<210> 4913
<211> 32
<212> PRT
<213> Homo sapiens

<400> 4913

```
Met Asn Phe Lys Phe Pro Cys Ala Thr Thr Val Phe Ile Leu Thr Thr
  1               5                  10                  15

Leu Lys Pro Val Val Ser Ser Phe Cys Tyr Cys Glu Val Asp Thr Gln
             20                  25                  30
```

<210> 4914
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4914
Cys Asp Ile Ala Phe Phe Leu Phe Leu Leu Leu Phe Ser Ala Ala Ala
1 5 10 15

Asp Leu Glu Met Lys
20

<210> 4915
<211> 142
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4915
Met His Gln Leu Leu Gln Leu Gln Arg Gln Glu Pro Cys Arg Leu Leu
1 5 10 15

Ser Pro Ser Pro Gln Pro Gly Leu His His Leu Cys Phe Gln Gln Ile
20 25 30

Glu Leu Leu Leu Leu Leu Leu His Leu Gln Trp Gly Leu Gly Leu Leu
35 40 45

Arg Gln Leu His His Lys Arg Leu Ala Gln Leu Leu Leu His Arg Arg
50 55 60

Arg Asp His Pro Ile Pro Pro Ile Gln Asp Ile Leu Gly Ile Ala Lys
65 70 75 80

Cys Pro Cys Pro Trp Ala Ile Ile Leu Met Arg Met Ala Ser Ile Ile
85 90 95

Cys His Ile His Gln Cys Ile Thr Arg Val Leu Asp Arg Leu Xaa Thr
100 105 110

Arg Asp Pro Ser Ser Leu His Thr Pro Ser Leu Ser Pro His Ser Ser
115 120 125

Leu Thr Ile His Ser Ser Asn Met Ser Ala Gln Gln Leu Ser
130 135 140

<210> 4916

<211> 10
<212> PRT
<213> Homo sapiens

<400> 4916
Met Arg Phe Phe Cys Val Ile Phe Val Phe
1 5 10

<210> 4917
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4917
His Leu His Val Ser Leu Leu Ser Phe Pro Pro Leu Phe Ile His Ser
1 5 10 15

Ala Asn Leu Ser Ala Asn Gln
20

<210> 4918
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4918
Met His Val Phe Leu Thr Phe Ile Gly Leu Ser Gly Thr Phe Cys Glu
1 5 10 15

Leu Pro Val Thr Phe Leu Cys
20

<210> 4919
<211> 52
<212> PRT
<213> Homo sapiens

<400> 4919
Met Leu Arg Glu Phe Trp Leu Leu Phe Leu Phe Cys Leu Gly Arg Glu
1 5 10 15

His Met Ser Lys Cys Asp Lys Cys Glu Gln Ile Ile Trp Arg Gly Glu
20 25 30

Glu Ile Gln Glu Arg Gly Gly Pro Val Phe Ser Leu Phe Trp Lys Asn
35 40 45

Asn His Phe Ser
50

<210> 4920
<211> 34
<212> PRT

<213> Homo sapiens

<400> 4920
Met Lys Asn Leu Thr His Phe Phe Leu Ser Leu Ser Ser Leu Ser Ser
1 5 10 15

Phe Leu Phe Leu Val Ser Ser Ser Phe Ser Arg Arg Ala Gly Pro Gly
20 25 30

Gln Gly

<210> 4921
<211> 42
<212> PRT
<213> Homo sapiens

<400> 4921
Met Met Thr Ile Thr Phe Cys Val Tyr Leu Pro Ile Leu Ser Leu Trp
1 5 10 15

His Trp Leu Val Met Arg Asn Gly His Thr Thr Ile Gln Met Glu Val
20 25 30

Gln Leu Gly Phe Pro Lys Ser Pro Leu Met
35 40

<210> 4922
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4922
Met Asn Gly Leu Cys Ile Leu Thr His Leu Ile Leu Ser Thr Ile Leu
1 5 10 15

<210> 4923
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4923
Met Arg Asp Leu Val Leu Lys Ile Val Phe Phe Tyr Asn Phe Leu Gly
1 5 10 15

Ile Thr Cys Phe Thr Val Ala Gly Thr Asn Leu Ile Asn Pro Val Phe
20 25 30

Glu Gln

<210> 4924
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4924
Met Ile Ser Phe Ile Arg Tyr Gln Leu Phe Leu His Xaa Ile Lys Ile
1 5 10 15

Ile Leu His Trp Leu Ile Leu Ile Phe Cys Trp Ser Ser His Phe Pro
20 25 30

Gly Ser His Xaa Pro His Ser Xaa Pro Ala Lys Val Lys Val Gly Asn
35 40 45

Leu Trp Xaa Trp Lys Gln Ser Gln Val Thr Trp Pro Thr Xaa Glu Met
50 55 60

Glu Pro Met Ala Leu Pro Met His Leu
65 70

<210> 4925
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4925
Met Arg Gly Lys His Val Cys Leu Leu Leu Leu Leu Leu Gly Arg Phe
1 5 10 15

<210> 4926
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4926
Met Met Glu Leu Val Leu Met Ala Ser Glu Val Ser Gly Gln Ser Ala
  1   5   10   15

Gln Ile Leu Ala Ser Phe Leu Ala Leu Val Ser Leu
             20   25

<210> 4927
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4927
Met His Arg Ala Phe Leu Val Thr Asn Arg Arg Trp Ala Leu Arg
  1   5   10   15

<210> 4928
<211> 22
<212> PRT
<213> Homo sapiens

<400> 4928
Met Ser Leu Ile Leu Phe Leu Leu Ile Asn Ile Arg Trp Asp Leu Ser
  1   5   10   15

Leu Val Leu Ser Gln Arg
             20

<210> 4929
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4929
Met Lys Lys Ile Val Phe Pro Phe Pro Gly Ser Phe Asn Ser Leu Phe
  1   5   10   15

Leu Arg Leu Phe Phe Ser Ser Leu Leu Ser Tyr Ser Ile Gln Thr Ser
             20   25   30

Pro Cys Leu Ile Leu Lys Arg
         35

<210> 4930
<211> 44
<212> PRT

<213> Homo sapiens

<400> 4930
Met Arg Arg Gln Pro Leu Ala Leu Arg Ser Leu Leu Cys Thr Leu Pro
1 5 10 15

Leu Val Pro Gly Val Ala Ile Tyr Leu Val Gly Pro Arg Pro Leu Ser
20 25 30

Ser Arg Lys Ala Ser Val Leu Ser Ser Ala Leu Cys
35 40

<210> 4931
<211> 38
<212> PRT
<213> Homo sapiens

<400> 4931
Met Pro Ala Ala Thr Trp His Pro Leu Ser Cys Leu Leu Ser Phe Leu
1 5 10 15

Val Cys Ala Val Val Gly Cys Ile Ser Pro Phe Leu His Cys Asn Lys
20 25 30

Gly Ile Pro Glu Ile Gly
35

<210> 4932
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4932
Met Phe Pro Met Leu Phe Cys Val Leu Gly His Leu Met His Phe Ser
1 5 10 15

Arg Ala Ser Cys Phe Pro Ser Val Arg Ile Pro
20 25

<210> 4933
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4933
Gly Thr Tyr Pro Leu Phe Leu Glu Cys Leu Ser Leu Ser Cys Leu Leu
1 5 10 15

Ser Gly Pro Gln
20

<210> 4934
<211> 32

<212> PRT
<213> Homo sapiens

<400> 4934
Met Phe Leu Leu Phe Leu Arg Ser Leu Pro Tyr Ile Leu Cys Ile Val
1 5 10 15

Lys Pro Phe Leu Lys Ser Asn Asp Leu Gly Lys Pro Thr Leu Val Cys
20 25 30

<210> 4935
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4935
Met Phe Glu Gly Pro Gly Arg Ala Val Ala Cys Leu Cys Leu
1 5 10

<210> 4936
<211> 20
<212> PRT
<213> Homo sapiens

<400> 4936
Met Cys Trp Leu Ala Ala Lys Asn Leu Leu Glu Cys Lys Tyr Ala Ser
1 5 10 15

Leu His His Leu
20

<210> 4937
<211> 39
<212> PRT
<213> Homo sapiens

<400> 4937
Met Trp Leu Lys Ile Gly Phe Leu Ser Ile Phe Ser Leu Val Leu Phe
1 5 10 15

Tyr Lys Thr Ser Leu Ser Thr Tyr His Val Pro Tyr Ser Leu Val Gly
20 25 30

Pro Glu Asp Lys Glu Met Tyr
35

<210> 4938
<211> 12
<212> PRT
<213> Homo sapiens

<400> 4938
Met Ala Ala Ser Met His Gln Cys Phe Pro Leu Thr
1 5 10

<210> 4939
<211> 37
<212> PRT
<213> Homo sapiens

<400> 4939
Met Met Cys Phe Leu Gly Ala Gly Cys Ile Glu Phe Lys Thr Trp Thr
1 5 10 15

Met Ala Trp Ile Ala Trp Val Gln Ile Leu Pro Leu Leu Tyr His Phe
20 25 30

Arg Gln Ala Gly Pro
35

<210> 4940
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4940
Met Glu Val Gly Val Ser Leu Leu Cys Arg Ile Trp Asp Trp Ala Asn
1 5 10 15

Val Cys Val Ala Ser Leu Asn
20

<210> 4941
<211> 7
<212> PRT
<213> Homo sapiens

<400> 4941
Ser Phe Lys Leu Leu Ile Thr
1 5

<210> 4942
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4942
Met Pro Ala Cys Gly Ser Leu Pro Pro Arg Ala His Gln Pro Trp Cys

```
  1               5                  10                  15

Pro Ala Gly Leu Leu Gln Ser Leu Val Leu Glu Gln Leu Leu Glu Phe
             20                  25                  30

Ser Ala Ala Ser Ser Pro Gln Pro Ser Arg Xaa Ser Glu Leu Leu Pro
         35                  40                  45

Gly Gln His Leu Leu Gly Pro Val Leu Arg Pro His Gly Ala Gly Leu
     50                  55                  60

Met Trp Glu Leu Ile Leu Ala Gly
 65                  70
```

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<210> 4943
<211> 21
<212> PRT
<213> Homo sapiens

<400> 4943
```
Met Ala Phe Leu Lys Gly Trp Leu Pro Phe Cys Trp Ser Gln Arg Ser
  1               5                  10                  15

Ile His Ser Tyr Leu
             20
```

<210> 4944
<211> 80
<212> PRT
<213> Homo sapiens

<400> 4944
```
Ile Gly His Ile Met Leu Leu Val Phe Pro Lys Cys Leu Val Ile Phe
  1               5                  10                  15

Tyr Cys Ser Phe Asn Tyr Arg Leu His Phe Phe Val Cys Leu Phe Leu
             20                  25                  30

Leu Ser Ser Gln Met Leu Pro Asn Met Ala Ala Ser Asn Pro Glu Phe
         35                  40                  45

Asn Pro Gly Thr Ile Leu Gln Thr Ala Gln Phe Ser Ser Glu Trp Ala
     50                  55                  60

Ile Cys Ile Pro Thr His Gln Ser Tyr Tyr Leu Lys Asn Tyr Ile Phe
 65                  70                  75                  80
```

<210> 4945
<211> 67
<212> PRT
<213> Homo sapiens

<400> 4945
Pro Phe Asn Thr Ile Leu Leu Phe Cys Leu Tyr Phe Leu Leu Thr Val
1 5 10 15

His Ile Ile Asn Tyr Val Ile Tyr Phe Phe Ile Ala Gly Ser Phe Asn
20 25 30

Pro Val Leu Cys Leu Gly Asp Ala Pro Ile Gln Leu His Val Thr Val
35 40 45

Ala Cys Ser Phe Pro Val Ser Cys Ser Val Pro Ser Cys Glu Phe Ile
50 55 60

Thr Val Tyr
65

<210> 4946
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4946
Met Cys Val Cys Val Tyr Ile Tyr Ile Tyr Val Tyr Ile Tyr Val Tyr
1 5 10 15

Ile Cys Ile Tyr Val Tyr Ile Asn Gln Asn Glu Lys Pro Phe Trp Ile
20 25 30

Leu Arg Ala Thr Lys Phe Arg Glu Val Ile Ser
35 40

<210> 4947
<211> 45
<212> PRT
<213> Homo sapiens

<400> 4947
Met Phe Tyr Asn Phe Leu Leu Ile Phe Ile Phe Leu Val Cys Gln Ser
1 5 10 15

Ser Pro Leu Thr Ser His Ile Tyr Leu Cys Cys Ile Leu Ala Trp Cys
20 25 30

Leu Ala Trp Arg Arg His Trp Asn Ile Gly Lys Asn Glu
35 40 45

<210> 4948
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4948
Gly Pro Gly Xaa Glu Val Ile Glu Ser Trp Glu Pro Ser Leu Xaa Leu
1 5 10 15

Cys Cys Ser Gly Gly Gly Glu
20

<210> 4949
<211> 92
<212> PRT
<213> Homo sapiens

<400> 4949
Met Pro Phe Gln Phe Pro Lys Lys Ala Arg Leu Val Pro Leu Leu Gly
1 5 10 15

Leu Cys Leu Glu Tyr Ser Gln Thr Leu Ser Arg Ala Pro Ala Trp Met
20 25 30

Ser Val Ser Arg Gly Pro Pro His Ser Thr Trp Ile Lys Ala Gly Leu
35 40 45

Pro Gly Ala Leu His His Thr Pro Phe Pro Pro Ser Ala Cys Leu Ala
50 55 60

Arg Pro Ala Arg Ser Phe His Asp Gly Arg Ala Trp Pro Leu Leu His
65 70 75 80

Ala Met Gln Ala Trp Pro Leu Pro Thr Thr Gly Pro
85 90

<210> 4950
<211> 27
<212> PRT
<213> Homo sapiens

<400> 4950
Met Phe Tyr Trp Gln Arg Leu Gly Leu Ala Leu Leu Ala Ser Val Leu
1 5 10 15

Gly Phe Phe Leu Cys Thr Ala Asp Trp Leu Ser
20 25

<210> 4951
<211> 33
<212> PRT
<213> Homo sapiens

<400> 4951

```
Met Leu Thr Thr Tyr Trp Val Leu Cys Ser Leu Pro Ile Gly Tyr Cys
  1               5                  10                  15

Ala His Tyr Leu Leu Gly Thr Leu Val Thr Ala Ser Tyr Asn Ile Pro
             20                  25                  30

Met
```

<210> 4952
<211> 190
<212> PRT
<213> Homo sapiens

<400> 4952

```
Ile Ala Leu Arg Leu Thr Leu Leu Pro Ala Ser Ser Ala Ala Leu His
  1               5                  10                  15

Leu Arg Arg Ser Pro Val Cys Leu Gln Leu Leu Pro Arg Gln Leu Ile
             20                  25                  30

Lys Gln Pro Val Arg Leu Met Phe Thr Lys Val Lys Leu Glu Gln Val
         35                  40                  45

Leu Lys Gly Pro Glu Glu Ala Leu Val Thr Cys Arg Gln Val Leu Arg
     50                  55                  60

Leu Trp Gln Thr Leu Tyr Ser Phe Ser Gln Leu Gly Gly Leu Glu Lys
 65                  70                  75                  80

Asp Gly Ser Phe Gly Glu Gly Leu Thr Met Lys Lys Gln Ser Gly Met
                 85                  90                  95

His Leu Thr Leu Pro Asp Ala His Asp Ala Asp Ser Gly Ser Arg Arg
            100                 105                 110

Ala Ser Ser Ile Ala Ala Ser Arg Leu Glu Glu Ala Met Ser Glu Leu
        115                 120                 125

Thr Met Pro Ser Ser Val Leu Lys Gln Gly Pro Met Gln Leu Trp Thr
    130                 135                 140

Thr Leu Glu Gln Ile Trp Leu Gln Ala Ala Glu Leu Phe Met Glu Gln
145                 150                 155                 160

Gln His Leu Lys Glu Ala Gly Phe Cys Thr Gly Gly Gly Gly Pro Leu
                165                 170                 175

Pro His Phe Ser Leu Ser Thr Leu Tyr Ala Gly Pro Ala Gly
            180                 185                 190
```

<210> 4953
<211> 194
<212> PRT
<213> Homo sapiens

<400> 4953

```
Met Cys Gly Ser Cys Trp Ala Phe Ser Val Thr Gly Asn Val Glu Gly
 1               5                  10                  15

Gln Trp Phe Leu Asn Gln Gly Thr Leu Leu Ser Leu Ser Glu Gln Glu
            20                  25                  30

Leu Leu Asp Cys Asp Lys Met Asp Lys Ala Cys Met Gly Gly Leu Pro
        35                  40                  45

Ser Asn Ala Tyr Ser Ala Ile Lys Asn Leu Gly Gly Leu Glu Thr Glu
    50                  55                  60

Asp Asp Tyr Ser Tyr Gln Gly His Met Gln Ser Cys Asn Phe Ser Ala
65                  70                  75                  80

Glu Lys Ala Lys Val Tyr Ile Asn Asp Ser Val Glu Leu Ser Gln Asn
                85                  90                  95

Glu Gln Lys Leu Ala Ala Trp Leu Ala Lys Arg Gly Pro Ile Ser Val
            100                 105                 110

Ala Ile Asn Ala Phe Gly Met Gln Phe Tyr Arg His Gly Ile Ser Arg
        115                 120                 125

Pro Leu Arg Pro Leu Cys Ser Pro Trp Leu Ile Asp His Ala Val Leu
    130                 135                 140

Leu Val Gly Tyr Gly Asn Arg Ser Asp Val Pro Phe Trp Ala Ile Lys
145                 150                 155                 160

Asn Ser Trp Gly Thr Asp Trp Gly Glu Lys Gly Tyr Tyr Tyr Leu His
                165                 170                 175

Arg Gly Ser Gly Ala Cys Gly Val Asn Thr Met Ala Ser Ser Ala Val
            180                 185                 190

Val Asp
```

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<210> 4954
<211> 232
<212> PRT
<213> Homo sapiens

<400> 4954

```
Met Leu Ser Thr His Asn Leu Pro Cys Leu Leu Val Glu Leu Leu Glu
 1               5                  10                  15

His Ser Pro Trp Ser Arg Arg Glu Gly Gly Lys Leu Gln Gln Phe Glu
            20                  25                  30

Gly Ser Arg Trp His Thr Val Ala Pro Ser Glu Gln Gln Lys Leu Ser
        35                  40                  45

Lys Leu Asp Gly Gln Val Trp Ile Ala Leu Tyr Asn Leu Leu Leu Ser
    50                  55                  60

Pro Glu Ala Gln Ala Arg Tyr Cys Leu Thr Ser Phe Ala Lys Gly Arg
65                  70                  75                  80
```

Leu Leu Lys Leu Arg Ala Phe Leu Thr Asp Thr Leu Leu Asp Gln Leu
85 90 95

Pro Asn Leu Ala His Leu Gln Ser Phe Leu Ala His Leu Thr Leu Thr
100 105 110

Glu Thr Gln Pro Pro Lys Lys Asp Leu Val Leu Glu Gln Ile Pro Glu
115 120 125

Ile Trp Glu Arg Leu Glu Arg Glu Asn Arg Gly Lys Trp Gln Ala Ile
130 135 140

Ala Lys His Gln Leu Gln His Val Phe Ser Pro Ser Glu Gln Asp Leu
145 150 155 160

Arg Leu Gln Ala Arg Arg Trp Ala Glu Thr Tyr Arg Leu Asp Val Leu
165 170 175

Glu Ala Val Ala Pro Glu Arg Pro Arg Cys Ala Tyr Cys Ser Ala Glu
180 185 190

Ala Ser Lys Arg Cys Ser Arg Cys Gln Asn Glu Trp Tyr Cys Cys Arg
195 200 205

Glu Cys Gln Val Lys His Trp Glu Lys His Gly Lys Thr Cys Val Leu
210 215 220

Ala Ala Gln Gly Asp Arg Ala Lys
225 230

<210> 4955
<211> 75
<212> PRT
<213> Homo sapiens

<400> 4955
Trp Val Ser Leu Cys Thr Leu Ala Ser Val Leu Leu Gly Ala Gly Ala
1 5 10 15

Val Ser His Ala Arg Ala Cys Glu Gly Thr Thr Gly Val Asn Glu Ser
20 25 30

Pro Met Met Thr Trp Gly Glu Val Glu Asn Thr Pro Leu Arg Val Glu
35 40 45

Gly Ser Glu Thr Pro Tyr Val Asp Arg Thr Pro Gly Pro Ala Phe Lys
50 55 60

Ile Leu Glu Pro Gly Arg Arg Asn Gly Trp Val
65 70 75

<210> 4956
<211> 49
<212> PRT
<213> Homo sapiens

<400> 4956
Met Ser Met Phe Trp Leu Lys Lys Leu Leu Glu Ser Gly Leu Phe Cys
1 5 10 15

Ala Met Cys Ser Pro Arg Ala Ser Thr Lys Lys Gly Phe Trp Cys Arg
20 25 30

Pro Lys Thr Thr Ile Ile Ile Ile Asp Tyr Ser Ser Pro Arg Gln Cys
35 40 45

Leu

<210> 4957
<211> 93
<212> PRT
<213> Homo sapiens

<400> 4957
Met Leu Cys Ala Ala Ala Ile Ala Thr Val Ala Ser Ser Cys Arg Glu
1 5 10 15

Gly Leu Val Pro Cys Ala Ala Gln Gln Leu Leu Glu Val Lys Leu Glu
20 25 30

Gln Val Leu Leu Leu Pro Gln Pro His Val Pro Gly Lys Gly Ala Ala
35 40 45

Ser Ser Pro Ser Gly Ser Ser Gly Pro Thr Cys Gly Ser Cys Cys Arg
50 55 60

Pro Pro Leu Pro Arg Ala Pro Pro Val Gly Pro Ser Tyr Thr Arg Cys
65 70 75 80

Ser Pro Gly Arg Cys Thr Ser Arg Pro Arg Ser Arg Ser
85 90

<210> 4958
<211> 176
<212> PRT
<213> Homo sapiens

<400> 4958
Met Ala Trp Ser Ser Pro Ala Gly Leu Leu Arg Phe Leu Phe Arg Gln
1 5 10 15

Leu Leu Leu Ala Thr Gln Gly Gly Pro Lys Gly Lys Glu Gln Ser Val
20 25 30

Leu Ala Pro Gln Pro Gly Pro Gly Pro Pro Phe Thr Leu Lys Pro Arg
35 40 45

Val Phe Leu His Leu Tyr Ile Ser Asn Thr Pro Lys Gly Ala Ala Arg
50 55 60

Asp Ile Tyr Leu Pro Pro Thr Ser Glu Gly Gly Leu Pro His Ser Pro
65 70 75 80

```
Pro Met Arg Leu Gln Ala His Val Leu Gly Gln Leu Lys Pro Val Cys
                 85                  90                  95

Tyr Val Ala Pro Ser Leu Cys Asp Thr His Val Gly Cys Leu Ser Ala
            100                 105                 110

Ser Asp Lys Leu Ala Arg Trp Ala Val Leu Gly Leu Gly Gly Ala Leu
        115                 120                 125

Leu Ala His Leu Val Ser Pro Leu Tyr Ser Thr Ser Leu Ile Leu Val
    130                 135                 140

Pro Pro Trp Gly Leu Pro Pro Val Ser Ala Arg Pro Pro Phe Ser Gly
145                 150                 155                 160

Pro Phe Thr Arg Arg Pro Gly Leu Trp Gly Ser Pro Thr Ser Trp Pro
                165                 170                 175
```

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<210> 4959
<211> 8
<212> PRT
<213> Homo sapiens

<400> 4959
Met Ser Glu Gly Leu Leu Cys Leu
1   5

<210> 4960
<211> 170
<212> PRT
<213> Homo sapiens

<400> 4960
```
Met Ile Leu Thr Met Leu Leu Met Leu Lys Leu Cys Thr Glu Val Arg
  1               5                  10                  15

Val Ala Asn Glu Leu Asn Ala Arg Arg Arg Ser Phe Thr Asp Phe Asp
            20                  25                  30

Pro His His Phe Trp Gln Trp Ser Ser Phe Ser Asp Tyr Val Gln Cys
        35                  40                  45

Val Leu Ala Phe Thr Gly Val Ala Gly Tyr Ile Thr Tyr Leu Ser Ile
    50                  55                  60

Asp Ser Ala Leu Phe Val Glu Thr Leu Gly Phe Leu Ala Val Leu Thr
65                  70                  75                  80

Glu Ala Met Leu Gly Val Pro Gln Leu Tyr Arg Asn His Arg His Gln
                85                  90                  95

Ser Thr Glu Gly Met Ser Ile Lys Met Val Leu Met Trp Thr Ser Gly
            100                 105                 110
```

```
Asp Ala Phe Lys Thr Ala Tyr Phe Leu Leu Lys Gly Ala Pro Leu Gln
        115                 120                 125

Phe Ser Val Cys Gly Leu Leu Gln Val Leu Val Asp Leu Ala Ile Leu
    130                 135                 140

Gly Gln Ala Tyr Ala Phe Ala Arg His Pro Gln Lys Pro Ala Pro His
145                 150                 155                 160

Ala Val His Pro Thr Gly Thr Lys Ala Leu
                165                 170
```

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<210> 4961
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4961
```
Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys
  1               5                   10
```

<210> 4962
<211> 13
<212> PRT
<213> Homo sapiens

<400> 4962
```
Met Ala Ser Leu Cys Ser Cys Leu Thr Ala Leu Met Cys
  1               5                   10
```

<210> 4963
<211> 152
<212> PRT
<213> Homo sapiens

<400> 4963
```
Met Gln Gly Thr Pro Gly Gly Gly Thr Arg Pro Gly Pro Ser Pro Val
  1               5                   10                  15

Asp Arg Arg Thr Leu Leu Val Phe Ser Phe Ile Leu Ala Ala Ala Leu
             20                  25                  30

Gly Gln Met Asn Phe Thr Gly Asp Gln Val Leu Arg Val Leu Ala Lys
         35                  40                  45

Asp Glu Lys Gln Leu Ser Leu Leu Gly Asp Leu Glu Gly Leu Lys Pro
     50                  55                  60

Gln Lys Val Asp Phe Trp Arg Gly Pro Ala Arg Pro Ser Leu Pro Val
 65                  70                  75                  80

Asp Met Arg Val Pro Phe Ser Glu Leu Lys Asp Ile Lys Ala Tyr Leu
                85                  90                  95
```

```
Glu Ser His Gly Leu Ala Tyr Ser Ile Met Ile Lys Asp Ile Gln Val
            100                 105                 110

Leu Leu Asp Glu Glu Arg Gln Ala Met Ala Lys Ser Arg Arg Leu Glu
        115                 120                 125

Arg Ser Thr Asn Ser Phe Ser Tyr Ser Ser Tyr His Thr Leu Glu Arg
    130                 135                 140

Tyr Ile Ala Gly Leu Thr Thr Leu
145                 150
```

<210> 4964
<211> 75
<212> PRT
<213> Homo sapiens

<400> 4964
```
Met Ser Ser Trp Leu Arg Val Val Asn Ala Ala Ile Ala Thr Ala Ser
  1               5                  10                  15

Ser Ala Ser Gly Glu Pro Glu Glu Pro Val Val Pro Ser Thr Thr Arg
             20                  25                  30

Gly Met Thr Arg Ala Met Thr Met Pro Pro Val Ser Pro Val Gly Ala
         35                  40                  45

Glu Gly Pro Val Val Leu Arg Ser Lys Asp Gly Arg Glu Arg Glu Arg
     50                  55                  60

Glu Lys Arg Phe Ser Phe Phe Lys Lys Asn Lys
 65                  70                  75
```

<210> 4965
<211> 35
<212> PRT
<213> Homo sapiens

<400> 4965
```
Met Trp Leu Ile Ala Pro Leu Cys Leu Leu Pro Val Ser Val Ala Gly
  1               5                  10                  15

Glu Leu Asn Arg Ala Leu Gly Leu Ser Ser Leu Cys Gly Glu Thr Asp
             20                  25                  30

Ile Tyr Gln
         35
```

<210> 4966
<211> 314
<212> PRT
<213> Homo sapiens

<400> 4966
```
Met Val Lys Leu Leu Val Ala Lys Ile Leu Cys Met Val Gly Val Phe
```

```
1               5                  10                  15

Phe Phe Met Leu Leu Gly Ser Leu Leu Pro Val Lys Ile Ile Glu Thr
            20                  25                  30

Asp Phe Glu Lys Ala His Arg Ser Lys Lys Ile Leu Ser Leu Cys Asn
        35                  40                  45

Thr Phe Gly Gly Gly Val Phe Leu Ala Thr Cys Phe Asn Ala Leu Leu
    50                  55                  60

Pro Ala Val Arg Glu Lys Leu Gln Lys Val Leu Ser Leu Gly His Ile
65                  70                  75                  80

Ser Thr Asp Tyr Pro Leu Ala Glu Thr Ile Leu Leu Leu Gly Phe Phe
                85                  90                  95

Met Thr Val Phe Leu Glu Gln Leu Ile Leu Thr Phe Arg Lys Glu Lys
            100                 105                 110

Pro Ser Phe Ile Asp Leu Glu Thr Phe Asn Ala Gly Ser Asp Val Gly
        115                 120                 125

Ser Asp Ser Glu Tyr Glu Ser Pro Phe Met Gly Gly Ala Arg Gly His
    130                 135                 140

Ala Leu Tyr Val Glu Pro His Gly His Gly Pro Ser Leu Ser Val Gln
145                 150                 155                 160

Gly Leu Ser Arg Ala Ser Pro Val Arg Leu Leu Ser Leu Ala Phe Ala
                165                 170                 175

Leu Ser Ala His Ser Val Phe Glu Gly Leu Ala Leu Gly Leu Gln Glu
            180                 185                 190

Glu Gly Glu Lys Val Val Ser Leu Phe Val Gly Val Ala Val His Glu
        195                 200                 205

Thr Leu Val Ala Val Ala Leu Gly Ile Ser Met Ala Arg Ser Ala Met
    210                 215                 220

Pro Leu Arg Asp Ala Ala Lys Leu Ala Val Thr Val Ser Ala Met Ile
225                 230                 235                 240

Pro Leu Gly Ile Gly Leu Gly Leu Gly Ile Glu Ser Ala Gln Gly Val
                245                 250                 255

Pro Gly Ser Val Ala Ser Val Leu Leu Gln Gly Leu Ala Gly Gly Thr
            260                 265                 270

Phe Leu Phe Ile Thr Phe Leu Glu Ile Leu Ala Lys Glu Leu Glu Glu
        275                 280                 285

Lys Ser Asp Arg Leu Leu Lys Val Leu Phe Leu Val Leu Gly Tyr Thr
    290                 295                 300

Val Leu Ala Gly Met Val Phe Leu Lys Trp
305                 310
```

<210> 4967
<211> 174
<212> PRT
<213> Homo sapiens

<400> 4967
Met Thr Phe Leu Leu Met Leu Leu Leu Ile Phe Phe Tyr Ile Phe Ala
1 5 10 15

Val Thr Gly Val Tyr Val Phe Ser Glu Tyr Thr Arg Ser Pro Arg Gln
20 25 30

Asp Leu Glu Tyr His Val Phe Phe Ser Asp Leu Pro Asn Ser Leu Val
35 40 45

Thr Val Phe Ile Leu Phe Thr Leu Asp His Trp Tyr Ala Leu Leu Gln
50 55 60

Asp Val Trp Lys Val Pro Glu Val Ser Arg Ile Phe Ser Ser Ile Tyr
65 70 75 80

Phe Ile Leu Trp Leu Leu Leu Gly Ser Ile Ile Phe Arg Ser Ile Ile
85 90 95

Val Ala Met Met Val Thr Asn Phe Gln Asn Ile Arg Lys Glu Leu Asn
100 105 110

Glu Glu Met Ala Arg Arg Glu Val Gln Leu Lys Ala Asp Met Phe Lys
115 120 125

Arg Gln Ile Ile Gln Arg Arg Lys Asn Met Ser His Glu Ala Leu Thr
130 135 140

Ser Ser His Ser Lys Ile Glu Asp Arg Ser Phe Gly Leu Gly Asp Ser
145 150 155 160

Cys Ala Arg Lys Ser Ala Arg Ala Asn Gly Asn Gly Ser Gly
165 170

<210> 4968
<211> 170
<212> PRT
<213> Homo sapiens

<400> 4968
Met Pro Ile Pro Ala Ser Pro Leu His Pro Pro Leu Pro Ser Leu Leu
1 5 10 15

Leu Tyr Leu Leu Leu Glu Leu Ala Gly Val Thr His Val Phe His Val
20 25 30

Gln Gln Thr Glu Met Ser Gln Thr Val Ser Thr Gly Glu Ser Ile Ile
35 40 45

Leu Ser Cys Ser Val Pro Asn Thr Leu Pro Asn Gly Pro Val Leu Trp
50 55 60

Phe Lys Gly Thr Gly Pro Asn Arg Lys Leu Ile Tyr Asn Phe Lys Gln
65 70 75 80

Gly Asn Phe Pro Arg Val Lys Glu Ile Gly Asp Thr Thr Lys Pro Gly
85 90 95

Asn Thr Asp Phe Ser Thr Arg Ile Arg Glu Ile Ser Leu Ala Asp Ala
100 105 110

Gly Thr Tyr Tyr Cys Val Lys Phe Ile Lys Gly Arg Ala Ile Lys Glu
115 120 125

Tyr Gln Ser Gly Arg Gly Thr Gln Val Phe Val Thr Val Ser Tyr Ser
130 135 140

Ser Arg Ser Gln Lys Ser Glu Ile Cys Ile Ser Gly Leu Lys Ser Arg
145 150 155 160

His Gln Gln Asn Cys Ser Phe Trp Arg Phe
165 170

<210> 4969
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4969
Met Leu Trp Thr Thr Leu Thr Gly Val Ser Leu Ala Leu Phe Pro Val
1 5 10 15

Ala Gln Ala Pro Thr Ala Leu Val Ala Leu Ala Val Ala Tyr Gly Phe
20 25 30

Thr Ser Xaa Ala Leu Ala Pro Leu Ala Phe Ser Val Leu Pro Glu Leu
35 40 45

```
Ile Gly Thr Arg Arg Ile Tyr Cys Gly Leu Gly Leu Leu Gln Met Ile
     50                  55                  60

Glu Ser Ile Gly Gly Leu Leu Gly Pro Xaa Leu Xaa Xaa Lys Trp Asn
 65                  70                  75                  80

Gly Val Xaa Arg Gly
                85
```

<210> 4970
<211> 303
<212> PRT
<213> Homo sapiens

<400> 4970

```
Met Ala Trp Cys Gly Arg Leu Leu Leu Ser Pro Ser Pro Thr Ala Ser
  1               5                  10                  15

Pro Ala Ala Arg Leu Leu Arg Thr Leu Ala Glu Thr Pro Pro Ala Asp
             20                  25                  30

Thr Phe Leu Leu Gly Asn Trp Cys Trp Met Cys Gln Arg Leu Trp Pro
         35                  40                  45

Trp Pro Ala Asn Gln Pro Leu Pro Gly Gly Leu Leu Pro Arg Pro Leu
     50                  55                  60

Ser Leu Ala Pro Ser Ser Ser Ser Ser Cys Cys Ser Pro Pro Cys Ser
 65                  70                  75                  80

Gln Asp Gly Arg Met Ala Ala Gln Gly Ala Pro Arg Phe Leu Leu Thr
                85                  90                  95

Phe Asp Phe Asp Glu Thr Ile Val Asp Glu Asn Ser Asp Asp Ser Ile
            100                 105                 110

Val Arg Ala Ala Pro Gly Gln Arg Leu Pro Glu Ser Leu Arg Ala Thr
        115                 120                 125

Tyr Arg Glu Gly Phe Tyr Asn Glu Tyr Met Gln Arg Val Phe Lys Tyr
    130                 135                 140

Leu Gly Glu Gln Gly Val Arg Pro Arg Asp Leu Ser Ala Ile Tyr Glu
145                 150                 155                 160

Ala Ile Pro Leu Ser Pro Gly Met Ser Asp Leu Leu Gln Phe Val Ala
                165                 170                 175

Lys Gln Gly Ala Cys Phe Glu Val Ile Leu Ile Ser Asp Ala Asn Thr
            180                 185                 190

Phe Gly Val Glu Ser Ser Leu Arg Ala Ala Gly His His Ser Leu Phe
        195                 200                 205

Arg Arg Ile Leu Ser Asn Pro Ser Gly Pro Asp Ala Arg Gly Leu Pro
    210                 215                 220

Ala Pro Arg Leu Pro His Ala Pro Leu Ser Phe Arg Arg Pro Arg Arg
225                 230                 235                 240
```

```
Pro Ser Pro Ala Arg Ser Ala Pro Ala Trp Cys Pro Gly Lys Arg Cys
                245                 250                 255

Arg Cys Ala Pro Pro Pro Ala Thr Gly Ala Glu Val Val Leu Ser Leu
            260                 265                 270

Ala Ala Cys Arg Gly Val Pro Gly Pro Thr Ala Glu Gly Ala Gly Lys
        275                 280                 285

Gly Asp Ser Ala Lys Thr Ala Leu Leu Lys Lys Lys Lys Lys Lys
    290                 295                 300
```

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<210> 4971
<211> 187
<212> PRT
<213> Homo sapiens

<400> 4971

```
Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
  1               5                  10                  15

Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
             20                  25                  30

Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
         35                  40                  45

Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
     50                  55                  60

His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser
 65                  70                  75                  80

Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro
                 85                  90                  95

Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp
            100                 105                 110

Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg
        115                 120                 125

Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu
    130                 135                 140

Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala
145                 150                 155                 160

Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
                165                 170                 175

Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
            180                 185
```

<210> 4972
<211> 187

<212> PRT
<213> Homo sapiens

<400> 4972
Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
1 5 10 15

Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
20 25 30

Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
35 40 45

Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
50 55 60

His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser
65 70 75 80

Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro
85 90 95

Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp
100 105 110

Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg
115 120 125

Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu
130 135 140

Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala
145 150 155 160

Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
165 170 175

Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
180 185

<210> 4973
<211> 187
<212> PRT
<213> Homo sapiens

<400> 4973
Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
1 5 10 15

Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
20 25 30

Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
35 40 45

Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
50 55 60

His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser

```
 65                  70                  75                  80

Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro
                85                  90                  95

Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp
            100                 105                 110

Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg
        115                 120                 125

Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu
    130                 135                 140

Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala
145                 150                 155                 160

Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
                165                 170                 175

Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
            180                 185
```

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```
<210> 4974
<211> 187
<212> PRT
<213> Homo sapiens

<400> 4974
Met Gly Lys Glu Ala Ala Asp Leu Leu Leu Leu Leu Leu Pro Val Ala
  1               5                  10                  15

Ser Ser Gly Cys Gln Glu Arg Gly Arg Thr Phe Val Trp Ala Leu Pro
             20                  25                  30

Arg Ala Gly Asn Phe Thr Trp Tyr Leu Lys Val Ser Phe Gly Ile Arg
         35                  40                  45

Pro Glu Thr Leu Gly Phe Ser Arg Leu Thr Thr Pro Phe Tyr Ser Lys
     50                  55                  60

His Leu Glu Asp Cys Phe Arg Val Ser Gln Gly Pro Ser Val Pro Ser
 65                  70                  75                  80

Ala Val Glu Cys Arg Thr Leu Cys Asp Ile Leu Tyr Pro Phe Phe Pro
                85                  90                  95

Gly Leu Val Ala Met Glu Gly Leu Val Cys Cys Asp Ser Thr Leu Asp
            100                 105                 110

Ala Val Ser Leu Met Leu Ala Arg Glu Ala Glu Asp Val Arg Gly Arg
        115                 120                 125

Gly Arg Leu Leu Gly Leu Ser Ser Phe Leu Cys Ile Ile Leu Gly Leu
    130                 135                 140

Ala Trp Thr Ala Pro Ala Ser Glu Ser Cys Gly Pro His Pro Leu Ala
145                 150                 155                 160
```

```
Ala Glu Pro Ser Thr Val Ile Leu Gly Ala Ile Phe Pro Cys Arg Thr
                165                 170                 175

Gly Ser Leu Ser Pro Ala Pro Thr Phe Gly Leu
            180                 185
```

<210> 4975
<211> 314
<212> PRT
<213> Homo sapiens

<400> 4975

```
Met Gly Ala Arg Gly Ala Leu Leu Leu Ala Leu Leu Leu Ala Arg Ala
  1               5                  10                  15

Gly Leu Arg Lys Pro Glu Ser Gln Glu Ala Ala Pro Leu Ser Gly Pro
            20                  25                  30

Cys Gly Arg Arg Val Ile Thr Ser Arg Ile Val Gly Gly Glu Asp Ala
        35                  40                  45

Glu Leu Gly Arg Trp Pro Trp Gln Gly Ser Leu Arg Leu Trp Asp Ser
    50                  55                  60

His Val Cys Gly Val Ser Leu Leu Ser His Arg Trp Ala Leu Thr Ala
65                  70                  75                  80

Ala His Cys Phe Glu Thr Tyr Ser Asp Leu Ser Asp Pro Ser Gly Trp
                85                  90                  95

Met Val Gln Phe Gly Gln Leu Thr Ser Met Pro Ser Phe Trp Ser Leu
            100                 105                 110

Gln Ala Tyr Tyr Thr Arg Tyr Phe Val Ser Asn Ile Tyr Leu Ser Pro
        115                 120                 125

Arg Tyr Leu Gly Asn Ser Pro Tyr Asp Ile Ala Leu Val Lys Leu Ser
    130                 135                 140

Ala Pro Val Thr Tyr Thr Lys His Ile Gln Pro Ile Cys Leu Gln Ala
145                 150                 155                 160

Ser Thr Phe Glu Phe Glu Asn Arg Thr Asp Cys Trp Val Thr Gly Trp
                165                 170                 175

Gly Tyr Ile Lys Glu Asp Glu Ala Leu Pro Ser Pro His Thr Leu Gln
            180                 185                 190

Glu Val Gln Val Ala Ile Ile Asn Asn Ser Met Cys Asn His Leu Phe
        195                 200                 205

Leu Lys Tyr Ser Phe Arg Lys Asp Ile Phe Gly Asp Met Val Cys Ala
    210                 215                 220

Gly Asn Ala Gln Gly Gly Lys Asp Ala Cys Phe Gly Asp Ser Gly Gly
225                 230                 235                 240

Pro Leu Ala Cys Asn Lys Asn Gly Leu Trp Tyr Gln Ile Gly Val Val
                245                 250                 255
```

```
Ser Trp Gly Val Gly Cys Gly Arg Pro Asn Arg Pro Gly Val Tyr Thr
            260                 265                 270

Asn Ile Ser His His Phe Glu Trp Ile Gln Lys Leu Met Ala Gln Ser
        275                 280                 285

Gly Met Ser Gln Pro Asp Pro Ser Trp Pro Leu Leu Phe Phe Pro Leu
    290                 295                 300

Leu Trp Ala Leu Pro Leu Leu Gly Pro Val
305                 310
```

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<210> 4976
<211> 240
<212> PRT
<213> Homo sapiens

<400> 4976

```
Met Gly Asn Cys Gln Ala Gly His Asn Leu His Leu Cys Leu Ala His
  1               5                  10                  15

His Pro Pro Leu Val Cys Ala Thr Leu Ile Leu Leu Leu Leu Gly Leu
             20                  25                  30

Ser Gly Leu Gly Leu Gly Ser Phe Leu Leu Thr His Arg Thr Gly Leu
         35                  40                  45

Arg Ser Pro Asp Ile Pro Gln Asp Trp Val Ser Phe Leu Arg Ser Phe
     50                  55                  60

Gly Gln Leu Thr Leu Cys Pro Arg Asn Gly Thr Val Thr Gly Lys Trp
 65                  70                  75                  80

Arg Gly Ser His Val Val Gly Leu Leu Thr Thr Leu Asn Phe Gly Asp
                 85                  90                  95

Gly Pro Asp Arg Asn Lys Thr Arg Thr Phe Gln Ala Thr Val Leu Gly
            100                 105                 110

Ser Gln Met Gly Leu Lys Gly Ser Ser Ala Gly Gln Leu Val Leu Ile
        115                 120                 125

Thr Ala Arg Val Thr Thr Glu Arg Thr Ala Gly Thr Cys Leu Tyr Phe
    130                 135                 140

Ser Ala Val Pro Gly Ile Leu Pro Ser Ser Gln Pro Pro Ile Ser Cys
145                 150                 155                 160

Ser Glu Glu Gly Ala Gly Asn Ala Thr Leu Ser Pro Arg Met Gly Glu
                165                 170                 175

Glu Cys Val Ser Val Trp Ser His Glu Gly Leu Val Leu Thr Lys Leu
            180                 185                 190

Leu Thr Ser Glu Glu Leu Ala Leu Cys Gly Ser Arg Leu Leu Val Leu
        195                 200                 205

Gly Ser Phe Leu Leu Leu Phe Cys Gly Leu Leu Cys Cys Val Thr Ala
```

```
    210                 215                 220

Met Cys Phe His Pro Arg Arg Glu Ser His Trp Ser Arg Thr Arg Leu
225                 230                 235                 240
```

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```
<210> 4977
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4977
Met Cys Ile Cys Val Leu Ile Leu Ile Cys Ile Phe Thr Asp Phe Ile
  1               5                  10                  15

Ile Ser Tyr Val Leu Asn Phe Tyr Leu Trp Arg Lys His Thr Thr
             20                  25                  30



<210> 4978
<211> 23
<212> PRT
<213> Homo sapiens

<400> 4978
Met His Leu Ile Ile Phe Phe Ile Ile Leu Cys Thr Asn Ser Ala Cys
  1               5                  10                  15

Asn Asn Gln Phe Thr Trp Lys
             20



<210> 4979
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4979
Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
  1               5                  10                  15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
             20                  25                  30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
         35                  40                  45

Glu Lys His
     50



<210> 4980
<211> 51
<212> PRT
```

<213> Homo sapiens

<400> 4980
Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45

Glu Lys His
50

<210> 4981
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4981
Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45

Glu Lys His
50

<210> 4982
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4982
Met Thr Leu Leu Leu Trp Lys Phe Asn Leu Phe Ile Val Phe Trp Ala
1 5 10 15

Leu Trp Val Val Arg Ala Gly Leu Trp Val Leu Gly Asn Ser Ser Gly
20 25 30

Ser Gln His Ser Lys Ala Lys Leu Thr Ser Ser Ser His Thr Leu Gln
35 40 45

Glu Lys His
50

<210> 4983
<211> 28
<212> PRT
<213> Homo sapiens

<400> 4983
His Glu Pro Arg Val Pro Trp Ser Asp Lys Leu Gly Asn Ala Ala Cys
1 5 10 15

Cys Thr Phe Leu Ser Lys Ile His Val Gln Arg Ile
20 25

<210> 4984
<211> 15
<212> PRT
<213> Homo sapiens

<400> 4984
Met Arg Glu Val Leu Leu Phe Phe Leu Phe Tyr Thr Arg Gly His
1 5 10 15

<210> 4985
<211> 51
<212> PRT
<213> Homo sapiens

<400> 4985
Met Pro Ser Glu Ala Phe Val Ile Val Ile Gln Pro Leu Ile Val Ser
1 5 10 15

Thr Ser Thr Asp His Phe Val Thr Thr Ser Cys Gly Ser Tyr Tyr Ser
20 25 30

Gln Thr Val Ser Leu Lys Arg Lys Pro Leu Phe Tyr Lys Ser Thr Leu
35 40 45

Gln Val Phe
50

<210> 4986
<211> 34
<212> PRT
<213> Homo sapiens

<400> 4986
Met Leu Met Ile Cys Leu Leu Ser Gly Arg Ala Phe Ala Tyr Phe Phe
1 5 10 15

Ser Asn Tyr Phe Thr Ser Thr Leu Ile Leu Leu Ser Gln Phe Ser Tyr
20 25 30

Gln His

<210> 4987
<211> 118
<212> PRT

<213> Homo sapiens

<400> 4987
Val Ala Arg Ala Val Cys Leu Val Phe Ala Leu Ile Val Phe Ser Cys
1 5 10 15

Ile Tyr Gly Glu Gly Tyr Ser Asn Ala His Glu Ser Lys Gln Met Tyr
20 25 30

Cys Val Phe Asn Arg Asn Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile
35 40 45

Gly Val Leu Ala Phe Leu Ala Ser Ala Phe Phe Leu Val Val Asp Ala
50 55 60

Tyr Phe Pro Gln Ile Ser Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile
65 70 75 80

Gly Asp Leu Leu Phe Ser Ala Leu Trp Thr Phe Leu Trp Phe Val Gly
85 90 95

Phe Cys Phe Leu Thr Asn Gln Trp Ala Val Thr Asn Pro Lys Thr Cys
100 105 110

Trp Trp Gly Pro Thr Leu
115

<210> 4988
<211> 4
<212> PRT
<213> Homo sapiens

<400> 4988
Cys Thr Leu Leu
1

<210> 4989
<211> 36
<212> PRT
<213> Homo sapiens

<400> 4989
His Lys Phe Ser Glu Cys Thr Val Tyr Phe Gly Phe Arg Arg Ala Val
1 5 10 15

Tyr Leu Ser Leu Leu Leu Leu Ala Ser Ser Ala Leu Gln Leu Pro Leu
20 25 30

Glu Arg Ala Phe
35

<210> 4990
<211> 62
<212> PRT
<213> Homo sapiens

<400> 4990
Lys Cys Phe His Leu Leu Trp Ser Leu Val Thr Ser Ala Gln Arg Pro
1 5 10 15

Ser Asp Gly Tyr Phe Phe Glu Ala Phe Ile Tyr Ile Ile Leu Phe Cys
20 25 30

Thr Met Phe Phe Leu Asn Val Gln Ile Leu Tyr Ser Ser Glu Lys Asn
35 40 45

Thr Val Phe Val Asp Asn His Ser Tyr Tyr Thr Val Leu Arg
50 55 60

<210> 4991
<211> 14
<212> PRT
<213> Homo sapiens

<400> 4991
Met Ser Thr Phe Leu Trp Asp Ile Gln Thr Thr Tyr Cys Phe
1 5 10

<210> 4992
<211> 16
<212> PRT
<213> Homo sapiens

<400> 4992
Leu Thr Leu Pro Tyr Leu Phe Leu Gly Gly Gly Trp Arg Gly Gly Val
1 5 10 15

<210> 4993
<211> 31
<212> PRT
<213> Homo sapiens

<400> 4993
Met Val Cys Trp Leu Leu Pro Leu Trp Val Thr Val Leu Ser Phe Pro
1 5 10 15

Val Gly Arg Asp Val Ala Ala Leu Leu Ile Phe Thr Ser Ser Tyr
20 25 30

<210> 4994
<211> 19
<212> PRT
<213> Homo sapiens

<400> 4994

```
Leu Ser Leu Leu His Pro Leu Ser Val Pro Pro Gly Ser Leu Glu Gln
  1               5                  10                  15

Asp Gly Val
```

<210> 4995
<211> 6
<212> PRT
<213> Homo sapiens

<400> 4995
```
Gly Asp Val Trp Leu Leu
  1               5
```

<210> 4996
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4996
```
Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser
  1               5                  10                  15

Leu Arg Trp Met Ser Leu Cys Tyr
             20
```

<210> 4997
<211> 24
<212> PRT
<213> Homo sapiens

<400> 4997
```
Met Cys Trp Pro Trp Gly Gly Pro Pro Leu Pro Ser Leu Pro Thr Ser
  1               5                  10                  15

Leu Arg Trp Met Ser Leu Cys Tyr
             20
```

<210> 4998
<211> 46
<212> PRT
<213> Homo sapiens

<400> 4998
```
Asn Thr Phe Trp His Gly Ser Ser Cys Leu Ser Ile Cys Gln Phe Ser
  1               5                  10                  15

Cys Glu Asp Ser Val Tyr Arg Leu Tyr Thr Ala His Val Glu Arg Gly
             20                  25                  30

Gln Trp Val Leu Tyr Leu Lys Tyr Val Leu Pro Phe Cys Cys
         35                  40                  45
```

<210> 4999
<211> 43
<212> PRT
<213> Homo sapiens

<400> 4999
Met Leu Leu Pro Ile Leu Leu Tyr Ser Phe Leu Tyr Pro Thr Ile Val
1 5 10 15

Ser Arg Asn Tyr Phe Lys Leu Ile Arg Ser Cys Met Leu Phe Leu Lys
20 25 30

Lys Lys Lys Lys Lys Glu Arg Lys Ile Ser Val
35 40

<210> 5000
<211> 23
<212> PRT
<213> Homo sapiens

<400> 5000
Phe Asn Ser Leu Leu Leu Leu Met Leu Pro Cys Tyr Leu Cys Cys His
1 5 10 15

Tyr Pro Leu Phe Phe Pro Ser
20

<210> 5001
<211> 40
<212> PRT
<213> Homo sapiens

<400> 5001
Met Ser Arg Gly Cys Leu Ser Leu Leu Leu Ile Ile Ile His Phe Leu
1 5 10 15

Gly Ser His Cys Pro His Leu Phe Ser Leu Glu Leu Arg Phe Ile Phe
20 25 30

Ile Leu Gln Thr Gly Lys Thr Glu
35 40

<210> 5002
<211> 14
<212> PRT
<213> Homo sapiens

<400> 5002
Phe Cys Thr Thr Phe Asn Phe Leu Phe Val Phe Cys Leu Arg
1 5 10

<210> 5003
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5003
Met Pro Ser Gln Thr Ala Arg Pro Gly Leu Gln Leu Phe Thr Thr Pro
1 5 10 15

Cys Ile Leu Gln Leu Leu Trp Cys Phe Ala Pro Pro Val Val Gly Asn
20 25 30

Phe Cys Thr Thr Leu
35

<210> 5004
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5004
Met Ala Gly Ser His Ala Val Trp Ala Trp His Cys Pro Gly Leu
1 5 10 15

<210> 5005
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5005
Met Leu Ser Asn Lys Ile Phe Pro Val Tyr Phe Gln Leu Val Lys Ser
1 5 10 15

Phe Ile Phe Val Val Gly Cys Cys Leu Phe Thr Leu Gly Gly Asn
20 25 30

<210> 5006
<211> 71
<212> PRT
<213> Homo sapiens

<400> 5006
Met Phe Leu Pro Leu Ser Val Asp Tyr His Tyr Arg Ile Leu Gly Phe
1 5 10 15

Phe Leu Ser Phe Cys Ser Ala Leu His Pro Leu Val Val Cys Phe Phe
20 25 30

Cys Trp Ala Leu Leu Ile Ser Leu Pro Leu Val Ser Ser Pro Thr Ala
35 40 45

Tyr Val Leu Lys Cys Val Phe Leu Lys Tyr Cys Phe Pro Leu Val Thr
50 55 60

Phe Leu Leu Glu Asp Phe Gln
65 70

<210> 5007
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5007
Met Ser Pro Val Leu Trp Trp Ser Trp Asn Leu Ile Leu Phe Met Asn
1 5 10 15

Phe Gln Ser Leu Glu Lys Ser Met Val Trp Ile Trp Glu Val Gly Leu
20 25 30

Ala Asp

<210> 5008
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5008
Met Gly Leu Leu Leu Phe Gly Gly Ile Phe Leu Leu Thr Val Ile Met
1 5 10 15

Lys Val Ile Thr Met Arg Asp Ser Asp Leu Phe Leu Lys Phe Gly Gly
20 25 30

Gly Ile Ser Pro His
35

<210> 5009
<211> 14
<212> PRT
<213> Homo sapiens

<400> 5009
Met Phe Leu Tyr Arg Asn Lys Phe Ile Pro Val Thr Leu Trp
1 5 10

<210> 5010
<211> 36
<212> PRT
<213> Homo sapiens

<400> 5010
Met Tyr Trp Val Ile Ala Gly Thr Thr Phe Thr Ser Leu Leu Cys Leu
1 5 10 15

Ile Gln Phe Ile Ser Leu Val Cys Ala Leu Leu Lys Tyr Leu Cys Leu
20 25 30

Asn Phe Cys Ile
35

<210> 5011
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5011
Met Ile Leu Ser Leu Val Leu Ser Tyr Asn Leu Phe Leu Val Gln Leu
1 5 10 15

Ile Leu Cys Thr Ile Thr Ala Glu Met Ser Asn Trp Asp Arg Leu Ala
20 25 30

Ser Lys Ala
35

<210> 5012
<211> 23
<212> PRT
<213> Homo sapiens

<400> 5012
His Leu Pro Ile Cys Phe Leu Phe Ser Ala Ser Pro Gly Ala Ser Gly
1 5 10 15

His Phe Leu Leu Pro Phe Leu
20

<210> 5013
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5013
Met Ser Ile Phe Val Gln Val Phe Val Trp Lys Tyr Val Phe Val Ser
1 5 10 15

Leu Arg Tyr Ile Gly Lys Glu Leu Gln Asn Gln Leu Cys Ala
20 25 30

<210> 5014
<211> 47
<212> PRT
<213> Homo sapiens

<400> 5014
Met Lys Cys Asn Ser Cys Ser Leu Gly Pro Phe His Ser Leu Phe Leu
1 5 10 15

Gly Pro Ala Cys Gly Leu Val Gly Thr Leu Glu Ser Arg His Ser Arg

```
            20                  25                  30

Gly Arg Gly Arg Ala Ala Phe Leu Ala Gly His Ser Arg Ala Leu
        35                  40                  45
```

<210> 5015
<211> 134
<212> PRT
<213> Homo sapiens

<400> 5015

```
Met Gly Pro Glu Asp Leu Gly Glu Arg Asp Asn Ser Phe His Cys Ile
  1               5                  10                  15

Phe Val Thr Ala Thr Phe Leu Glu Thr Phe Phe Trp Lys Arg Leu Pro
            20                  25                  30

Trp Leu Leu Val Gln Met Gly Val Ser Gln Gly Ala Gly Leu Cys Pro
        35                  40                  45

Trp Asn Leu Ser Leu Ala Thr Cys Phe Arg Asp Trp Ser Gly Gly Thr
     50                  55                  60

Glu Gly Leu Gly Phe Ser Leu Trp Gly Leu Cys Cys Leu Trp Gly Tyr
 65                  70                  75                  80

Thr Glu Gly Lys Ala Gly Gln Trp Gly Leu Cys Cys Gly Glu Trp Gln
                85                  90                  95

Leu Ala Gln Ser Arg Asp Lys Ile Leu Glu Leu Gly Arg Ser Pro Ala
            100                 105                 110

Phe Gly Val Ala Phe Gly Ala Pro Gly Thr Ala Gly Arg Gly Ala Gln
        115                 120                 125

Tyr Leu Leu Ser Ser Ala
    130
```

<210> 5016
<211> 48
<212> PRT
<213> Homo sapiens

<400> 5016

```
Met Ser Phe Tyr Ile Leu Leu Leu Ala Leu Ile Leu Phe Ile Ala Gly
  1               5                  10                  15

Phe Ile Leu Arg Ser Ile Ile Ile Lys Arg Ser Leu Phe Ser Val Asn
            20                  25                  30

Phe Met Gln Thr Arg Trp Gln Arg Leu Asn Phe Ser Leu Arg Asp Gln
        35                  40                  45
```

<210> 5017
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5017
Met Cys Leu Ile Phe Ser Ile Cys Phe Leu Cys Ile His Ile Gly Phe
1 5 10 15

Cys Phe Val Phe Asn Leu Leu Ile Met Gly Leu Asn Phe Gln Ile Tyr
20 25 30

Phe

<210> 5018
<211> 53
<212> PRT
<213> Homo sapiens

<400> 5018
Lys Glu Ala Gly Thr Trp Leu Val Phe Trp Ile Arg Leu Asp Phe Ser
1 5 10 15

Thr Gly Gln Asp Ser Leu Phe Leu Gly Arg Ala Glu Cys His Val Asp
20 25 30

Ser Ser Asp Arg Ile Thr Ala Val Pro Leu Ser Leu Gly Phe Glu Ser
35 40 45

Leu Gly Leu Gly His
50

<210> 5019
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5019
Met Cys Pro Tyr Cys Pro Thr Ser Cys Ala Leu Leu Val Met Cys Phe
1 5 10 15

Leu Leu Ile Ser Leu Ser Cys Leu Val Ala Ser Ser Leu Leu Leu Lys
20 25 30

Val

<210> 5020
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5020

```
Met Cys Leu Asn Leu Thr Val Ile Ser Ala Leu Leu Trp Trp Ser Gly
  1               5                  10                  15

Thr Lys Val Ala Val Ala Pro Arg Tyr Ala Tyr Thr Val Lys Asn Asn
             20                  25                  30

Leu
```

<210> 5021
<211> 53
<212> PRT
<213> Homo sapiens

<400> 5021
```
Met Lys Gly His Phe Gly Lys Gly Leu Asp Glu Leu Val Ala Phe Asn
  1               5                  10                  15

Leu Cys Leu His Leu Pro Leu Ser Ala Thr Leu Gly Arg Pro Gly Gly
             20                  25                  30

Ala Ser Glu Asp His Arg Pro Thr Gly Leu Ala Ile Met Thr Pro Leu
         35                  40                  45

Glu Val Ser Ser Ser
     50
```

<210> 5022
<211> 40
<212> PRT
<213> Homo sapiens

<400> 5022
```
Glu Val Lys Cys Ile Tyr Ile Phe Leu Trp Leu Leu Met Leu Leu Val
  1               5                  10                  15

Leu His Leu Arg Ile His Cys Gln Ile Gln Gly His Glu Asp Leu Leu
             20                  25                  30

Leu Cys Phe Leu Leu Arg Ile Leu
         35                  40
```

<210> 5023
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5023
Met Phe Phe Pro Cys Leu Pro Thr Leu Xaa Leu Arg Ile Leu His Ser
1 5 10 15

Gly Trp Val Gly Leu Phe Leu Leu Ile Ser Ser Arg Ala Pro Ser Ser
20 25 30

Ser Leu Ala Trp Lys His Gly Pro Gly Xaa Leu Trp Trp Pro Arg Arg
35 40 45

Pro Leu Arg Ser Cys Thr Gly Leu Ala Ser Cys Gly
50 55 60

<210> 5024
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5024
Met Met Lys Met Lys Met Lys Met Gln Trp Met Leu Met Val Val Met
1 5 10 15

Met Met Ile Lys Gly Val Met Met Asn Thr Val Met Met Met Thr
20 25 30

<210> 5025
<211> 47
<212> PRT
<213> Homo sapiens

<400> 5025
Met Arg Ile Tyr Leu Met Leu Val Leu Val Tyr Cys Glu Leu Asn Ile
1 5 10 15

Thr Ala Leu Glu Pro Lys Arg Arg Cys Leu Arg His Gly Leu Leu Leu
20 25 30

Leu Cys Ser Phe Gln Gly Ala Pro Val Ile Pro Ala Val Ser Thr
35 40 45

<210> 5026
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5026
Met Ala Ser Gly Leu Asn Ser Gly Ala Phe Gly Val Val
1 5 10

<210> 5027
<211> 17

<212> PRT
<213> Homo sapiens

<400> 5027
Met Leu Leu Leu Cys Val Phe Leu Phe Val Phe Met Val Phe Gly Ala
1 5 10 15

Ile

<210> 5028
<211> 50
<212> PRT
<213> Homo sapiens

<400> 5028
Met Gly Ala Trp Pro Pro Cys Pro Ala Arg Ser Ser Arg Arg Arg Ser
1 5 10 15

Leu Ala Ala Trp Cys Val Ala Cys Cys Trp Ser Ser Arg Trp Ala Ala
20 25 30

Pro Ser Ser Ser Thr His Cys Ala Arg Arg Asn Thr Gly Pro Ser Arg
35 40 45

Pro Arg
50

<210> 5029
<211> 49
<212> PRT
<213> Homo sapiens

<400> 5029
Met Leu Tyr Leu Pro Ala Leu Trp Phe His His Val Gln Gln Ser Gln
1 5 10 15

Gly Cys Ile Ala Val Asn Phe Trp Tyr Asp Met Glu Tyr Asp Leu Lys
20 25 30

Tyr Ser Tyr Phe Gln Leu Leu Asp Ser Leu Thr Lys Ala Ser Gly Leu
35 40 45

Asp

<210> 5030
<211> 21
<212> PRT
<213> Homo sapiens

<400> 5030
Met Thr Ala Glu Ala Met Phe Ser Phe Leu Ile Phe Ile Cys Leu Leu
1 5 10 15

Ile Leu Phe Ser Lys
20

<210> 5031
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5031
Met Phe Phe Glu Ile His Pro Leu Leu Thr Phe Cys Thr Ile Cys Phe
1 5 10 15

Ile Ile Cys Thr Leu Cys Val Gly Gly Leu Cys Val Gln Tyr Ala Ile
20 25 30

Gly Phe Ser
35

<210> 5032
<211> 45
<212> PRT
<213> Homo sapiens

<400> 5032
Met Leu Leu Leu Ser Phe His Ser Leu Leu Tyr Phe Gly Asp Leu Phe
1 5 10 15

Ile Leu Leu Cys Val His Leu Ile Leu Gln Cys Val Ser Thr Thr Phe
20 25 30

Asn Leu Phe Thr Tyr Arg Thr Met Gln Glu Phe Leu Trp
35 40 45

<210> 5033
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5033
Met Cys Leu Cys Asn Asp Cys Leu Phe Trp Phe Thr Met Phe Leu
1 5 10 15

<210> 5034
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5034
Met Ile Thr Asp Val Gln Leu Ala Ile Phe Ala Asn Met Leu Gly Val
1 5 10 15

Ser Leu Phe Leu Leu Val Val Leu Tyr His Tyr Val Ala Val Asn Asn
20 25 30

Pro Lys Lys Gln Glu
35

<210> 5035
<211> 99
<212> PRT
<213> Homo sapiens

<400> 5035
Phe His Pro Phe Thr Phe Tyr Val Phe Val Cys Leu Cys Leu Lys Cys
1 5 10 15

Ile Tyr His Arg Gln His Ile Val Gly Ser Cys Phe Phe Ile Gln Phe
20 25 30

Asp Ser Leu Cys Leu Leu Ile Asp Val Trp Val His Leu His Leu Met
35 40 45

Leu Leu Ser Val Trp Leu Gly Leu Ser Leu Ser Ser Cys Tyr Leu Phe
50 55 60

Cys Ile Cys Ser Met Tyr Ala Leu Phe Pro Phe Leu Pro Phe Ser Ala
65 70 75 80

Phe Phe Trp Ile Thr Val Phe Phe Asn Asp Ser Ile Val Phe Ser Ser
85 90 95

Leu Ile Tyr

<210> 5036
<211> 234
<212> PRT
<213> Homo sapiens

<400> 5036
Lys Leu Leu Tyr Thr Thr Leu Arg His Pro Lys Cys Phe Leu Gln Arg
1 5 10 15

Leu Ser Leu Glu Asn Cys His Leu Thr Glu Ala Asn Cys Lys Asp Leu
20 25 30

Ala Ala Val Leu Val Val Ser Arg Glu Leu Thr His Leu Cys Leu Ala
35 40 45

Lys Asn Pro Ile Gly Asn Thr Gly Val Lys Phe Leu Cys Glu Gly Leu
50 55 60

Arg Tyr Pro Glu Cys Lys Leu Gln Thr Leu Val Leu Trp Asn Cys Asp
65 70 75 80

Ile Thr Ser Asp Gly Cys Cys Asp Leu Thr Lys Leu Leu Gln Glu Lys
85 90 95

Ser Ser Leu Leu Cys Leu Asp Leu Gly Leu Asn His Ile Gly Val Lys
100 105 110

Gly Met Lys Phe Leu Cys Glu Ala Leu Arg Lys Pro Leu Cys Asn Leu
115 120 125

Arg Cys Leu Trp Leu Trp Gly Cys Ser Ile Pro Pro Phe Ser Cys Glu
130 135 140

Asp Leu Cys Ser Ala Leu Ser Cys Asn Gln Ser Leu Val Thr Leu Asp
145 150 155 160

Leu Gly Gln Asn Pro Leu Gly Ser Ser Gly Val Lys Met Leu Phe Glu
165 170 175

Thr Leu Thr Cys Ser Ser Gly Thr Leu Arg Thr Leu Arg Leu Lys Ile
180 185 190

Asp Asp Phe Asn Asp Glu Leu Asn Lys Leu Leu Glu Glu Ile Glu Glu
195 200 205

Lys Asn Pro Gln Leu Ile Ile Asp Thr Glu Lys His His Pro Trp Glu
210 215 220

Glu Arg Pro Ser Ser His Asp Phe Met Ile
225 230

<210> 5037
<211> 244
<212> PRT
<213> Homo sapiens

<400> 5037
Met Met Arg Thr Gln Cys Leu Leu Gly Leu Arg Thr Phe Val Ala Phe
1 5 10 15

Ala Ala Lys Leu Trp Ser Phe Phe Ile Tyr Leu Leu Arg Arg Gln Ile
20 25 30

Arg Thr Val Ile Gln Tyr Gln Thr Val Arg Tyr Asp Ile Leu Pro Leu
35 40 45

Ser Pro Val Ser Arg Asn Arg Leu Ala Gln Val Lys Arg Lys Ile Leu
50 55 60

Val Leu Asp Leu Asp Glu Thr Leu Ile His Ser His His Asp Gly Val
65 70 75 80

Leu Arg Pro Thr Val Arg Pro Gly Thr Pro Pro Asp Phe Ile Leu Lys
85 90 95

Val Val Ile Asp Lys His Pro Val Arg Phe Phe Val His Lys Arg Pro
100 105 110

His Val Asp Phe Phe Leu Glu Val Val Ser Gln Trp Tyr Glu Leu Val
115 120 125

Val Phe Thr Ala Ser Met Glu Ile Tyr Gly Ser Ala Val Ala Asp Lys
130 135 140

Leu Asp Asn Ser Arg Ser Ile Leu Lys Arg Arg Tyr Tyr Arg Gln His

```
145                 150                 155                 160

Cys Thr Leu Glu Leu Gly Ser Tyr Ile Lys Asp Leu Ser Val Val His
                165                 170                 175

Ser Asp Leu Ser Ser Ile Val Ile Leu Asp Asn Ser Pro Gly Ala Tyr
            180                 185                 190

Arg Ser His Pro Asp Asn Ala Ile Pro Ile Lys Ser Trp Phe Ser Asp
        195                 200                 205

Pro Ser Asp Thr Ala Leu Leu Asn Leu Leu Pro Met Leu Asp Ala Leu
    210                 215                 220

Arg Phe Thr Ala Asp Val Arg Ser Val Leu Ser Arg Asn Leu His Gln
225                 230                 235                 240

His Arg Leu Trp
```

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<210> 5038
<211> 68
<212> PRT
<213> Homo sapiens

<400> 5038
```
Met Phe Ala Thr Gln Gly His Ser Cys Pro Gln Gly Leu Ser Asp Phe
  1               5                  10                  15

Leu Leu Leu Ala Leu Leu Met Ser Leu His His Pro Pro Ser Pro Leu
             20                  25                  30

Leu Gln Arg Gly Asn Asn Lys Gly Thr Glu Asp Ser Cys Ile Trp Glu
         35                  40                  45

Lys Ser Cys Gln Ile Gln Lys Phe Ala Ile Met Tyr Phe Tyr Val Phe
     50                  55                  60

Met Pro Cys Asp
 65
```

<210> 5039
<211> 57
<212> PRT
<213> Homo sapiens

<400> 5039
```
Glu Trp Trp Pro Phe Cys Pro Pro Pro Ile Pro Val Ser Thr Phe Ile
  1               5                  10                  15

Lys Leu Leu Cys Cys Leu His Phe Leu Thr Thr Ser Leu Ala Ala Tyr
             20                  25                  30

Ile Ser Phe Phe Pro Ser Gly Val Ser Pro Ser Leu Leu Thr Gly Ser
         35                  40                  45

Ser Pro Leu His Leu Arg Ser Gly Leu
```

50 55

<210> 5040
<211> 7
<212> PRT
<213> Homo sapiens

<400> 5040
Ile Ile Gly Thr Phe Tyr Gln
1 5

<210> 5041
<211> 40
<212> PRT
<213> Homo sapiens

<400> 5041
Met Thr Gly His Ser Pro Ser Pro Ile Tyr Leu Val Leu Ala Trp Gly
1 5 10 15

Val Thr Ala Ala Ala Thr Thr Leu Thr Gly Pro Val Leu Ser Arg Tyr
20 25 30

Asn Leu Ala Thr Pro Trp Asn Ser
35 40

<210> 5042
<211> 28
<212> PRT
<213> Homo sapiens

<400> 5042
Met Pro Asn Cys Leu His Ile Ile Leu Gly Ser Phe Leu Leu Ile Ile
1 5 10 15

Phe Thr Val Cys Met Phe Ile Gly Lys Gly Leu Leu
20 25

<210> 5043
<211> 27
<212> PRT
<213> Homo sapiens

<400> 5043
Met Leu Leu Leu Phe Trp Thr Phe Ala Leu Asp Val Val Pro Thr Glu
1 5 10 15

Trp Leu Ala Gly Arg Arg Glu Ile Leu Phe Arg
20 25

<210> 5044

<211> 47
<212> PRT
<213> Homo sapiens

<400> 5044
Met Tyr Ser Lys Ser Ser Ala Asn Ile Ser Gln Gly Met Leu Asp Ile
1 5 10 15

Leu Leu Trp Ile Asp Leu Ala His Asp Asp Leu Leu Gly Ser Pro Ser
20 25 30

Pro Val Ile Leu Arg Ser His Ala His Ser Gly Ile Leu Thr Val
35 40 45

<210> 5045
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5045
Met Phe Ser Arg Phe Ile His Leu Phe Gly Val Leu Asn Leu Met Trp
1 5 10 15

Leu Ser Leu Val Ser Cys Gln Cys Leu Phe Ala Phe Cys Phe Gln Arg
20 25 30

<210> 5046
<211> 76
<212> PRT
<213> Homo sapiens

<400> 5046
Met Gly Lys Pro Pro Thr His Glu Ala Ile His Ser Val Val Lys Trp
1 5 10 15

Leu Leu Ile Val Thr Lys Leu Leu Arg Leu Ser Gln Ile Cys Phe Leu
20 25 30

Leu Phe Pro Leu Phe Leu Phe Leu Thr Ser Gly Thr Arg Leu Gly Ile
35 40 45

Arg Leu Ile Phe Phe Cys Lys Thr Ala Glu Phe Phe Ile Phe Asn Ile
50 55 60

His Phe Ile Ile Arg Lys Ile Ile Tyr Thr Ile Ser
65 70 75

<210> 5047
<211> 28
<212> PRT
<213> Homo sapiens

<400> 5047
Met Gly Arg Arg Ile Arg Trp His Ser Trp Met Thr Leu Trp Ile Phe
1 5 10 15

Leu Met Lys Ser Ala Leu Val Trp Met Ile Trp Leu
20 25

<210> 5048
<211> 20
<212> PRT
<213> Homo sapiens

<400> 5048
Met Phe Gln Ala Pro Cys Phe Leu Met Tyr Leu Val Phe Phe Pro His
1 5 10 15

Phe Glu Arg Ile
20

<210> 5049
<211> 54
<212> PRT
<213> Homo sapiens

<400> 5049
Met Val Arg Ala Gln Met Ser Pro Gln Ser Pro Ala Leu Ala Glu Trp
1 5 10 15

Ile Leu Leu Leu Ala Leu Leu Leu Arg Leu Arg Trp Arg Gln Leu Trp
20 25 30

Asn Lys Met Phe Leu Ala Pro Lys Lys Lys Lys Lys Lys Lys Lys Lys
35 40 45

Lys Lys Lys Lys Lys Lys
50

<210> 5050
<211> 16
<212> PRT
<213> Homo sapiens

<400> 5050
Met Ser Ser Trp Leu Leu Val Tyr Ile Gly Trp Leu Leu Ser Ser Leu
1 5 10 15

<210> 5051
<211> 318
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (192)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5051
Met Lys Ala Pro Leu Ala Thr Leu Ala Leu Leu Trp Tyr His Thr Val
1 5 10 15

Val Arg Pro Phe Phe Ala Leu Asp Gly Ser Asp Asn Lys Ala Gly Leu
20 25 30

Asp Glu Ala Lys Glu Ile Leu Leu Lys Lys Glu Ala Ala Tyr Pro Asn
35 40 45

Ser Ser Leu Phe Met Phe Phe Lys Gly Arg Ile Gln Arg Leu Glu Cys
50 55 60

Gln Ile Asn Ser Ala Leu Thr Ser Phe His Thr Ala Leu Glu Leu Ala
65 70 75 80

Val Asp Gln Arg Glu Ile Gln His Val Cys Leu Tyr Glu Ile Gly Trp
85 90 95

Cys Ser Met Ile Glu Leu Asn Phe Lys Asp Ala Phe Asp Ser Phe Glu
100 105 110

Arg Leu Lys Asn Glu Ser Arg Trp Ser Gln Cys Tyr Tyr Ala Tyr Leu
115 120 125

Thr Ala Val Cys Gln Gly Ala Thr Gly Asp Val Asp Gly Ala Gln Ile
130 135 140

Val Phe Lys Glu Val Gln Lys Leu Phe Lys Arg Lys Asn Asn Gln Ile
145 150 155 160

Glu Gln Phe Ser Val Lys Lys Ala Glu Arg Phe Arg Lys Gln Thr Pro
165 170 175

Thr Lys Ala Leu Cys Val Leu Ala Ser Ile Glu Val Leu Tyr Leu Xaa
180 185 190

Lys Ala Leu Pro Asn Cys Ser Phe Pro Asn Leu Gln Arg Met Ser Gln
195 200 205

Ala Cys His Glu Val Asp Asp Ser Ser Val Val Gly Leu Lys Tyr Leu
210 215 220

Leu Leu Gly Ala Ile His Lys Cys Leu Gly Asn Ser Glu Asp Ala Val
225 230 235 240

Gln Tyr Phe Gln Arg Ala Val Lys Asp Glu Leu Cys Arg Gln Asn Asn
245 250 255

Leu Tyr Val Gln Pro Tyr Ala Cys Tyr Glu Leu Gly Cys Leu Leu Leu
260 265 270

Asp Lys Pro Glu Thr Val Gly Arg Gly Arg Ala Leu Leu Leu Gln Ala
275 280 285

Lys Glu Asp Phe Ser Gly Tyr Asp Phe Glu Asn Arg Leu His Val Arg
290 295 300

Ile His Ala Ala Leu Ala Ser Leu Arg Glu Leu Val Pro Gln
305 310 315

<210> 5052
<211> 24
<212> PRT
<213> Homo sapiens

<400> 5052
Met Phe Leu Val Leu Val Ile Cys Tyr Tyr Leu Leu Leu Ser Ser Arg
1 5 10 15

Gly Pro Asp Trp Pro Trp His Asn
20

<210> 5053
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5053
Met Leu Arg Asn Thr Ala Leu Trp Tyr His Leu Leu Thr Asp Leu Leu
1 5 10 15

Leu Ile Tyr Leu Ile Gly Arg Val Val Ser Ile Ser Phe Tyr Phe Tyr
20 25 30

His

<210> 5054
<211> 57
<212> PRT
<213> Homo sapiens

<400> 5054
Glu Pro Leu Ala Asp Phe Cys Phe Leu Tyr Arg Leu Leu Cys Arg Leu
1 5 10 15

Thr Ser Arg Leu Tyr Pro Cys Leu Cys Glu Arg Gly Cys Val Val Gly
20 25 30

Thr Gly Thr Ile Leu Thr Gln Lys Leu Ala Thr Ser His Cys Leu Ala
35 40 45

Gln Met Trp Ile Ile Val Ile Thr Asn
50 55

<210> 5055
<211> 32

<212> PRT
<213> Homo sapiens

<400> 5055
Met Ser Phe Ser Cys Ala Cys Ala Gly Ser Ala Ser Val Phe Phe Leu
1 5 10 15

Phe Cys Val Ala Gln Pro Leu Pro Gly Thr Arg Gln Pro Trp Gln Glu
20 25 30

<210> 5056
<211> 46
<212> PRT
<213> Homo sapiens

<400> 5056
Met Thr Lys Lys Pro Gln Ser Ile Ala Cys Ser Thr Leu Ser Leu Trp
1 5 10 15

Cys Val Cys Leu Ala Ser Ile Ile His Glu Val Asn Leu Glu Gly Gln
20 25 30

Thr Gly Asn Asn Met Ser Trp Tyr Ile Leu Pro Gly Asn Thr
35 40 45

<210> 5057
<211> 116
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5057
Met Phe Ser Val Phe Phe Leu Leu Leu Leu Leu Phe Leu Xaa Phe Ile
1 5 10 15

Leu Leu Leu Leu Leu Pro Pro Ser Ser Ser Val Leu Leu Leu Phe Leu
20 25 30

Phe Leu Phe Leu Leu Leu Phe Ser Phe Ser Ser Phe Phe Ser Phe Phe
35 40 45

Phe Phe Leu Gly Gln Gly Leu Ile Leu Leu Pro Arg Leu Glu Tyr Thr
50 55 60

Gly Thr Ile Ile Ala Arg Cys Arg Leu Lys Leu Leu Thr Ser Ser Asn
65 70 75 80

Pro Pro Phe Leu Ala Ser Gln Ser Ala Gly Ile Arg Gly Met Ser His
85 90 95

Cys Thr Trp Pro Val Phe His Tyr Ser Tyr Ile Cys Tyr Gly Asn Val
100 105 110

Thr Ser Asp Leu
115

<210> 5058
<211> 39
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5058
Met Cys Ile Glu Ala Cys Phe Thr Pro Ile Cys Ser Phe Cys Cys Val
1 5 10 15

Ser Phe Ser Gly Leu Xaa His Ser Leu Phe Leu Leu Phe Ile Lys Asn
20 25 30

Arg Ile Ser Lys Asp Tyr Glu
35

<210> 5059
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5059
Met Ser Glu Val Lys Ile Leu Arg Phe Val Leu Ile Thr Phe Val Phe
1 5 10 15

Cys Lys His Ser Asp Pro Pro Ile Ser Ala Leu Ser Leu Thr
20 25 30

<210> 5060
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5060
Met Glu Thr Ala Ile Cys Leu Val Leu Phe Pro Gln Leu Leu Leu Leu
1 5 10 15

Val Val His Ile Ser Ser Ser Ala Leu Ala His Gly Thr Leu Ile Asn
20 25 30

<210> 5061
<211> 50
<212> PRT
<213> Homo sapiens

<400> 5061
Met Gln Trp Pro Arg Ala Glu Gly Leu Ile His Gly Leu Phe Gln Gly
1 5 10 15

Val Leu Leu Ala Gly Trp Thr Trp Glu Cys Ala Val Gly Gln Gly Ala
20 25 30

Ala Gly Val Leu Pro Pro Pro Ser Thr Asn Leu Ala Pro Trp Gly Pro
35 40 45

Ala Ser
50

<210> 5062
<211> 41
<212> PRT
<213> Homo sapiens

<400> 5062
Asp Pro Ser Phe Arg Ser Leu Leu Pro Leu Phe Leu Leu Phe Arg Gly
1 5 10 15

Cys Val Ile Thr Glu Thr Trp Asn Ala Glu Lys Cys Tyr His Arg Asn
20 25 30

Leu Glu Cys Arg Lys Ile Phe Ala Phe
35 40

<210> 5063
<211> 26
<212> PRT
<213> Homo sapiens

<400> 5063
Met Leu Leu Gly Val Phe Leu Thr Gly Leu Phe Leu Pro Ile Leu Met
1 5 10 15

Ala Ile Phe Leu Leu Lys Cys Asn Ser Phe
20 25

<210> 5064
<211> 16
<212> PRT
<213> Homo sapiens

<400> 5064
Met Ile Leu Ile Val Pro Tyr Ile Leu Lys Val Val Trp Phe Tyr Phe
1 5 10 15

<210> 5065
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5065
Met Phe Met Phe Leu Leu Leu Val Gly Leu Cys Leu Phe Pro Leu Asn
1 5 10 15

Ile Thr Lys Lys Asn Lys Lys Lys Ser Cys Ile Asn Ile Cys Cys Ile
20 25 30

Ser Lys

<210> 5066
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5066
Asn Val Cys Phe Ser Cys Leu Leu Lys Leu Phe Trp Gly Ser Gln
1 5 10 15

<210> 5067
<211> 14
<212> PRT
<213> Homo sapiens

<400> 5067
Ala Ala Leu Trp Gln Ser Leu Leu Phe Cys Phe Val Cys Phe
1 5 10

<210> 5068
<211> 64
<212> PRT
<213> Homo sapiens

<400> 5068
Met Val Leu Leu Gln Thr Val Val Trp Leu Ser Ser His Val Leu Trp
1 5 10 15

Leu Pro Gln Asn Arg Ala Gln Ala Ala Arg Gly His Leu His Val Pro
20 25 30

Leu Leu Ala Val Pro Ala Thr Ser Lys Leu Cys His Arg Leu Asn Ser
35 40 45

Ser Phe Arg Gly Pro Gly Trp His Pro Gly Asp Leu Pro Leu Leu Phe
50 55 60

<210> 5069
<211> 42
<212> PRT
<213> Homo sapiens

<400> 5069
Leu Trp Arg Leu Ala Val Leu Lys Leu Ile Cys Gly Phe Ile Asn Thr
1 5 10 15

Leu Leu Ile Ile Phe Pro Gly Glu Ile Phe Ile Lys Cys Arg Pro Ala
20 25 30

Lys Ala Ile Leu Lys Arg Arg Arg Arg His
35 40

<210> 5070
<211> 45
<212> PRT
<213> Homo sapiens

<400> 5070
Met Leu Phe Val Leu Tyr Met Ser Leu Leu Ser Lys Ala Val Ser Ser
1 5 10 15

Met Arg Thr Gly Thr Ile Leu Ile Asn Cys Val Phe Leu Ala Pro His
20 25 30

Thr Ser Ala Trp Asn Ile Ala Thr Ile Asn Lys Cys Leu
35 40 45

<210> 5071
<211> 27
<212> PRT
<213> Homo sapiens

<400> 5071
Ser Tyr Ile Ser Asp Thr Arg Ser His Phe Leu Phe Leu Tyr Phe Ile
1 5 10 15

His Pro Phe Ile Gln Gln Ile Phe Ala Glu His
20 25

<210> 5072
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5072
Met Leu Leu His Leu Cys Leu Ser Leu Pro Ser Ser Val Trp Phe Leu
1 5 10 15

Gly Val Leu Leu Leu Ser Cys Val Asn Thr Ala Leu Gln Tyr His
20 25 30

<210> 5073
<211> 56
<212> PRT
<213> Homo sapiens

<400> 5073
Met Ala Arg Ala Cys Val Phe Gln Leu Ser Leu Trp Arg Lys Leu Pro
1 5 10 15

Val Gly Ile Asn Leu Ser Pro Ala Ile Leu Ser Leu Ser Leu Gly Cys
20 25 30

Leu Gly Leu Gly Phe Leu Leu Leu Leu Glu Arg Met Thr Thr Asp Ser
35 40 45

Gly Ile Arg Gln Arg Arg Gln Thr
50 55

<210> 5074
<211> 70
<212> PRT
<213> Homo sapiens

<400> 5074
Met Gln Ser Leu Pro Ser Ala Ser Thr Phe Ser Ala Ser Ser Ala Cys
1 5 10 15

Gly Ala Ala Met Arg Pro Ala Arg Gly Ser Ala Pro Ser Ala Thr Arg
20 25 30

Pro Leu Val Pro Thr Thr Ser Ile Val Ser Thr Ser Ala Glu Pro Glu
35 40 45

Thr Gln Gly Thr Leu Glu His His Gly Pro Trp Gly Leu Cys Pro Ile
50 55 60

Ser Ser Pro Pro Gln Val
65 70

<210> 5075
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5075
Met Ala Ser Arg Val Leu Ala Ala Leu Ile Val Ala Ser Val Val Gly
1 5 10 15

Leu Ala Glu Leu Tyr Val Met Val Arg Ala Met Glu Gly Glu Leu Gly
20 25 30

Glu Leu

<210> 5076
<211> 27
<212> PRT
<213> Homo sapiens

<400> 5076
Met Ala Phe Leu Gly Leu Thr Leu Cys Thr Leu His Leu Gly Ile Gln
1 5 10 15

Ala Ser Thr Val Pro Leu Gly Leu Pro Ser Pro
20 25

<210> 5077
<211> 43
<212> PRT
<213> Homo sapiens

<400> 5077
Met Val Val Glu Glu Leu Ala Asn Ile Lys Leu Ala Pro Glu Ile Gln
1 5 10 15

Thr Cys Val Tyr Cys Ser Gly Ser Met Glu Leu Val Thr Met Gly Lys
20 25 30

Arg Gln Arg Leu Glu Leu Cys Lys Val Met Glu
35 40

<210> 5078
<211> 81
<212> PRT
<213> Homo sapiens

<400> 5078
Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser
1 5 10 15

Val Pro Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly
20 25 30

Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val
35 40 45

Pro Pro Ala Met Leu Pro Val Gln Pro Val Arg Val Ser Ala Asp Arg
50 55 60

Pro Ala Asp Thr Pro Ala Pro Ser Pro Ser Lys Asp Leu Leu Ser His
65 70 75 80

Pro

<210> 5079
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5079
Met Tyr Ile Leu Leu Phe Leu Leu Ala Ile Phe Leu Arg Leu Tyr
1 5 10 15

<210> 5080
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5080
Met Leu Pro Ser Thr Arg Val Phe Thr Leu Arg Tyr Cys Trp Ser Cys
1 5 10 15

Gln Leu Ser Arg Asp Met Ile Ser Leu Phe Arg Gln Pro Cys Ser Phe
20 25 30

<210> 5081
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5081
Met Ala Lys Ser Ser Gly His Asn Ser Leu Val Ala Phe Val Val Val
1 5 10 15

Val Val Val Leu Phe Phe Val Cys Phe Glu Thr Met Ser Pro Lys Gln
20 25 30

<210> 5082
<211> 4
<212> PRT
<213> Homo sapiens

<400> 5082
Met Val Lys Pro
1

<210> 5083
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5083
Met Pro Leu Val Pro Leu Leu Leu Ser Cys Pro Pro Thr Trp Leu Ala
1 5 10 15

Arg Phe Gly Val Ser Leu Pro Cys Ser Gly Ile Pro Val Leu Ala
20 25 30

<210> 5084
<211> 83
<212> PRT
<213> Homo sapiens

<400> 5084
Met Tyr Glu Gln Ala Ala Ala Gly His Gly Pro Ile Ser Pro Phe Ser
1 5 10 15

Leu Cys Val Ser Leu Gly Ile His Pro Ala Asn Gln Gly Arg Pro Gly
20 25 30

Val Trp Ala Leu Gly Thr Asn Gly Ala His Ile Leu Glu Trp Gln Ile
35 40 45

Leu Gly Asp Ala Leu Pro Val Pro Ala Gly Pro Val Pro Pro Thr Gln
50 55 60

Ser Ser Pro Gln Thr Trp Cys Asn Phe Thr Arg Ala Ile Pro Phe Pro
65 70 75 80

Arg Leu Pro

<210> 5085
<211> 12
<212> PRT
<213> Homo sapiens

<400> 5085
Trp Trp Gly Arg Val Trp Pro Val Asn Pro Asp His
1 5 10

<210> 5086
<211> 9
<212> PRT
<213> Homo sapiens

<400> 5086
Met Leu Leu Leu Val Phe Leu Asp Cys
1 5

<210> 5087
<211> 73
<212> PRT

<213> Homo sapiens

<400> 5087
Met Asn Ile Thr Arg Lys Leu Trp Ser Arg Thr Phe Asn Cys Ser Val
1 5 10 15

Pro Cys Ser Asp Thr Val Pro Val Ile Ala Val Ser Val Phe Ile Leu
20 25 30

Phe Leu Pro Val Val Phe Tyr Leu Ser Ser Phe Leu His Ser Glu Gln
35 40 45

Lys Lys Arg Lys Leu Ile Leu Pro Lys Arg Leu Lys Ser Ser Thr Ser
50 55 60

Phe Ala Asn Ile Gln Glu Asn Ser Asn
65 70

<210> 5088
<211> 9
<212> PRT
<213> Homo sapiens

<400> 5088
Met Lys Ser Pro Glu Tyr His Tyr Gly
1 5

<210> 5089
<211> 129
<212> PRT
<213> Homo sapiens

<400> 5089
Met Val Asp Leu Ile Gly Glu Val Leu Leu Pro Leu Leu Gly Gln Glu
1 5 10 15

Ala Glu Ala Cys Thr Ala Asp Asp Pro Ala Asp His Val Lys Val Pro
20 25 30

Ala His Ala Ala Val His Val Val Gln Asn His Ala Leu Leu Gly His
35 40 45

Val Val Phe Asp Asp Asp Asp Ala Val Gly Ala Glu Ala Ala Leu Ala
50 55 60

Ala Pro Gln Glu Leu Gly Gln Val Leu Ile Gly Glu Val Ala Trp Gly
65 70 75 80

Gly Gln Arg Gln Gly Tyr Gln Gly Thr Met Gln Ala Asp Val Gly Thr
85 90 95

Gly Trp Asp Val Leu Leu Ser Pro Ala Glu Pro Leu Ile Cys Ala Gln
100 105 110

His Phe Val Cys Thr His Gly Leu Ile Gly Ser Gln Ser Arg Glu Ile
115 120 125

Tyr

<210> 5090
<211> 61
<212> PRT
<213> Homo sapiens

<400> 5090
Met Cys Leu Leu Leu Leu Trp Leu Thr Thr Phe Gln Arg Thr Ser Gly
1 5 10 15

Ala Leu Arg Arg Gly Gly Leu Ser Ser Pro Ala Trp Ala Met Arg Ser
20 25 30

Pro Ser Val Tyr Ser Thr Gln Thr Pro Ser Pro Met Met Ser Thr Gly
35 40 45

Thr Leu Arg Gly Leu Ser Gly Ala Met Cys Asn Leu Ser
50 55 60

<210> 5091
<211> 12
<212> PRT
<213> Homo sapiens

<400> 5091
Leu Ala Ser Thr Ala Asn Phe Trp Val Val Ile Thr
1 5 10

<210> 5092
<211> 46
<212> PRT
<213> Homo sapiens

<400> 5092
Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu Glu Ile Leu Pro
1 5 10 15

Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys Val Ile Leu Leu
20 25 30

Leu Ala Gly Phe Ala Leu Ser Trp Pro Val Phe Ile Gln Ile
35 40 45

<210> 5093
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5093
Met Val Thr Leu Ser Ser Leu Ile Leu Glu Met Trp Tyr Cys Phe Trp
1 5 10 15

Leu Asn Ile Leu Val Gly Arg Val Ser Ser Arg Gly Phe His Leu Ala
20 25 30

Leu Thr Ile Lys Met Thr Leu Ile Ser Trp Val Arg Lys Pro Ile Trp
35 40 45

Glu Leu Cys Gln
50

<210> 5094
<211> 46
<212> PRT
<213> Homo sapiens

<400> 5094
Met Lys Ser Gln Cys Tyr Ser Pro Ser Tyr Phe Ala Phe Phe Cys Leu
1 5 10 15

Val Phe Phe Gln Ile Thr Ser Ala Ser Ser Gln Thr Leu Arg Gly His
20 25 30

Val Leu Cys Arg Thr Thr Leu Arg Asp Ser Ser Ala Tyr Cys
35 40 45

<210> 5095
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5095
Met Phe Thr Cys Thr Ala Gly Leu Ser Cys Leu Phe Gln Phe Cys Phe
1 5 10 15

Thr Cys Gly Val Phe Thr Asp Phe Lys Lys Glu Cys Met His Gly Val
20 25 30

Glu Gln Asp Thr Val Ser
35

<210> 5096
<211> 55
<212> PRT
<213> Homo sapiens

<400> 5096
Met Pro Ser Glu Ile Ile Tyr Leu Leu Ser Leu Leu Tyr Thr Ser Val
1 5 10 15

Cys Leu Gln Gln Pro Pro Gln Pro Arg Trp Val Cys Phe Cys Phe Leu
20 25 30

Gly Trp Gly Ala Gly Thr Gly Gly Gly Arg Arg Ala Gly Phe Arg Ser
35 40 45

Leu Leu Ala Glu Pro Phe Val
50 55

<210> 5097
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5097
Met Leu Val Leu Gly Leu Thr Lys Phe Ala Val Gly Ile Val Leu Ile
1 5 10 15

Leu Leu Val Arg Gln Leu Val Gln Asn Leu Ser Leu Gln Val Leu Tyr
20 25 30

Ser Trp Phe Lys Val Val Thr Arg Asn Lys Glu Ala Arg Arg Arg Leu
35 40 45

Glu Ile Glu Val Pro Tyr Lys Phe Val Thr Tyr Thr Ser Val Gly Ile
50 55 60

Cys Ala Thr Thr Phe Val Pro Met Leu His Arg Phe Leu Gly Leu Xaa
65 70 75 80

<210> 5098
<211> 50
<212> PRT
<213> Homo sapiens

<400> 5098
Met Trp Gln Ser Cys Leu Cys Arg Phe Val Leu Leu Ile Glu Gly Leu
1 5 10 15

Glu Pro Gly Ala Leu Pro Ala Phe Pro Gly Ser Pro Ser Ser Arg His
20 25 30

Gly Leu Thr Val Ser His Val Glu Gly Leu Gly Ser Leu Met Lys Cys
35 40 45

Gly Leu
50

<210> 5099
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5099
Met Trp Cys Pro Ala Phe Gly Arg Val Phe Cys Ser Arg
1 5 10

<210> 5100
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5100
Met Pro Leu Leu Gln Trp Leu Ala Leu Leu Trp Pro Leu Leu Thr Thr
1 5 10 15

Glu Ala Pro Ser Gly Gly Cys Ser Gln Pro Gly Pro Gly Pro Arg Ser
20 25 30

Ser Leu Thr
35

<210> 5101
<211> 91
<212> PRT
<213> Homo sapiens

<400> 5101
Phe Leu Ile Ile Ile Ile Ser Ala Thr Val Met Phe Leu His Val Ser
1 5 10 15

Glu Arg His Cys Pro Cys Leu Arg Leu Glu Val Leu Ser Ala Lys Val
20 25 30

Phe Phe Ser Cys Ile Val Arg Ser Ile His Pro Leu Cys Ala Leu Ser
35 40 45

Ala Phe Glu Arg Leu Gly Cys Ser Gln Ala Ala Val Leu Arg Asp Leu
50 55 60

Lys Arg Asp Leu Val Ser Leu Gly Ala Glu Ser Ile Tyr Leu Gly Thr
65 70 75 80

Leu Phe Gln Glu Arg Pro Cys Leu His Phe His
85 90

<210> 5102
<211> 14
<212> PRT
<213> Homo sapiens

<400> 5102
Met Leu His Ser Arg Leu Tyr Ser Leu Val Gly Trp Leu Leu
1 5 10

<210> 5103

<211> 26
<212> PRT
<213> Homo sapiens

<400> 5103
Met Arg Thr Tyr Leu Trp Ile Leu Thr Cys Ile Arg Thr Ser Val Gln
1 5 10 15

Gly Pro Leu Met Thr Met Ala Cys Pro Gly
20 25

<210> 5104
<211> 47
<212> PRT
<213> Homo sapiens

<400> 5104
Met Arg Asn Thr Ala Tyr Leu Pro Ile Ser Leu Leu Leu Val Gly Ser
1 5 10 15

Gly Leu Cys Leu Ala Gln Arg Ile Thr Leu Phe Thr Ser Gly Thr Phe
20 25 30

Arg Arg Lys Arg Leu Tyr Arg Asn Tyr Lys Ala Thr Gln Met Ser
35 40 45

<210> 5105
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5105
Met Ala Ser Gln Thr Ser Xaa Ile Ile Trp Pro Leu Ala Thr Leu Pro
1 5 10 15

His Pro Ile Ser Ser Phe Ala Leu Tyr Ser Ser Tyr Thr Xaa Arg Gly
20 25 30

Val Pro Lys Thr Ser Arg Trp Val Arg Pro Gln Asp Leu His Met Cys
35 40 45

Cys Ser Leu Tyr Leu His Arg Ser Phe Leu Phe Ser Cys Leu Leu Asn
50 55 60

Ser Tyr Leu Pro Ser Gly Leu Ile Ser Thr Phe Ser Pro Leu Leu Val
65 70 75 80

Cys Cys Ser Tyr Leu Arg Ser Asn Ser Arg Glu Met
85 90

<210> 5106
<211> 35
<212> PRT
<213> Homo sapiens

<400> 5106
Met Cys Leu Leu Trp Ser Trp Leu Trp Val Gln Pro Thr Leu Arg Cys
1 5 10 15

Val Phe Ile Phe His Tyr Lys Asn Tyr Lys Gln Leu Phe Ile Ser Arg
20 25 30

Gln Glu Phe
35

<210> 5107
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5107
Met Lys Lys Leu Met Pro Arg Glu Phe Arg Gly Phe Ala Phe Arg Cys
1 5 10 15

Leu Thr Cys Arg Tyr Leu Ile Leu Leu Lys Ile Ser Leu Asp Ile Val
20 25 30

Ser Val Arg Cys Thr Asp Leu
35

<210> 5108
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5108
Met Val Lys Asn Ala Leu Trp Asn Thr Leu His Ser Phe Leu Ser Arg
1 5 10 15

Leu Arg Phe Thr Ile Thr Ile Trp Lys Phe Leu Gly Cys Phe Gln Cys
20 25 30

Leu Gly Gly Ala Gln Lys Cys
35

<210> 5109
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5109
Met Gly Arg Phe Val Leu Asn Val Ile Phe Ile Leu Tyr Pro Val Leu
1 5 10 15

Ser Trp Glu His Lys Ala Lys Arg Pro Ser Ile Leu His Tyr Leu Leu
20 25 30

Lys Thr Cys Pro Gln Ala
35

<210> 5110
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5110
Met Leu Phe Leu Phe Trp Phe Cys Gln Phe Ala Thr Arg Glu Phe Ile
1 5 10 15

Phe Glu Gln Leu Pro Met Ala Met Gly Leu Gly Leu Tyr Ser Arg Ala
20 25 30

<210> 5111
<211> 73
<212> PRT
<213> Homo sapiens

<400> 5111
Met Phe Leu Tyr Ser Val Leu Gly Ser Ile Leu Gly Gln Leu Ala Val
1 5 10 15

Ile Tyr Ile Pro Pro Leu Gln Arg Val Phe Gln Thr Glu Asn Leu Gly
20 25 30

Ala Leu Asp Leu Leu Phe Leu Thr Gly Leu Ala Ser Ser Val Phe Ile
35 40 45

Leu Ser Glu Leu Leu Lys Leu Cys Glu Lys Tyr Cys Cys Ser Pro Lys
50 55 60

Arg Val Gln Met His Pro Glu Asp Val
65 70

<210> 5112
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5112
Met Cys Ser Cys Ser Trp Ala Ser Ser Cys Thr Val Trp
1 5 10

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<210> 5113
<211> 328
<212> PRT
<213> Homo sapiens

<400> 5113

```
Met Ser Ser Leu Lys Val Ala Ala Thr Met Ile Ile Leu Lys Phe Ser
  1               5                  10                  15

Met Ala Pro Thr Ala Val Pro Leu Ser Leu Leu Glu Phe Val Met Gly
             20                  25                  30

Pro Glu Ala Pro Ser Leu Leu Pro Pro Thr Ser Cys Pro Phe Ala Ser
         35                  40                  45

Ser Val Thr Thr Ala Ser Gln Gly Arg Gly Phe Arg Ala Glu Tyr Tyr
     50                  55                  60

Ser Ser Pro Ser Asn Asp Ser Thr Asn Leu Leu Cys Leu Pro Asn His
 65                  70                  75                  80

Met Gln Ala Ser Val Ser Arg Ser Tyr Leu Gln Ser Leu Gly Phe Ser
                 85                  90                  95

Ala Ser Asp Leu Val Ile Ser Thr Trp Asn Gly Tyr Tyr Glu Cys Arg
            100                 105                 110

Pro Gln Ile Thr Pro Asn Leu Val Ile Phe Thr Ile Pro Tyr Ser Gly
        115                 120                 125

Cys Gly Thr Phe Lys Gln Ala Asp Asn Asp Thr Ile Asp Tyr Ser Asn
    130                 135                 140

Phe Leu Thr Ala Ala Val Ser Gly Gly Ile Ile Lys Arg Arg Thr Asp
145                 150                 155                 160

Leu Arg Ile His Val Ser Cys Arg Met Leu Gln Asn Thr Trp Val Asp
                165                 170                 175

Thr Met Tyr Ile Ala Asn Asp Thr Ile His Val Ala Asn Asn Thr Ile
            180                 185                 190

Gln Val Glu Glu Val Gln Tyr Gly Asn Phe Asp Val Asn Ile Ser Phe
        195                 200                 205

Tyr Thr Ser Ser Ser Phe Leu Tyr Pro Val Thr Ser Arg Pro Tyr Tyr
    210                 215                 220

Val Asp Leu Asn Gln Asp Leu Tyr Val Gln Ala Glu Ile Leu His Ser
225                 230                 235                 240

Asp Ala Val Leu Thr Leu Phe Val Asp Thr Cys Val Ala Ser Pro Tyr
                245                 250                 255

Ser Asn Asp Phe Thr Ser Leu Thr Tyr Asp Leu Ile Arg Ser Gly Cys
            260                 265                 270

Val Arg Asp Asp Thr Tyr Gly Pro Tyr Ser Ser Pro Ser Leu Arg Ile
        275                 280                 285
```

```
Ala Arg Phe Arg Phe Arg Ala Phe His Phe Leu Asn Arg Phe Pro Ser
    290                 295                 300

Val Tyr Leu Arg Cys Lys Met Val Val Cys Arg Ala Tyr Asp Pro Leu
305                 310                 315                 320

Pro Ala Ala Thr Glu Ala Val Cys
                325
```

<210> 5114
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5114
```
Met Gln Gly Gln Gln Thr Phe Pro Val Lys Gly Gln Ile Gly Ser Ile
  1               5                  10                  15

Phe Gly Phe Leu Gly Cys Leu Leu Leu Leu Leu Leu Leu Trp Glu
             20                  25                  30
```

<210> 5115
<211> 16
<212> PRT
<213> Homo sapiens

<400> 5115
```
Met Pro Phe Tyr Cys Leu Ser Leu Leu Leu Leu Phe Phe Lys Leu Ser
  1               5                  10                  15
```

<210> 5116
<211> 109
<212> PRT
<213> Homo sapiens

<400> 5116
```
Met Gly Ser Thr Gln Val Ser Phe Phe Phe Leu Phe Ser Phe Leu Leu
  1               5                  10                  15

Pro Ser Phe Leu His Ser Ser Leu Pro Pro Asn Leu Pro Pro Ser Leu
             20                  25                  30

Pro Ser Leu Leu Pro Ser Phe Leu Asn Leu Gly Pro Pro Lys Ser Cys
         35                  40                  45

Trp Asp Tyr Lys Ala Met Ser His Arg Gly Pro Ala Tyr Ile Pro Leu
     50                  55                  60

Phe Leu Ile Ile Ser Phe Phe Ile Phe Ser Ile Leu Leu Thr Phe Ile
 65                  70                  75                  80
```

Leu Thr Phe Leu Ser Ala Met Lys Thr Ala Pro Asn Leu Pro His Leu
85 90 95

Arg Leu Ala Ile Phe Asp Ser Leu Met Gly Glu Val Gln
100 105

<210> 5117
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5117
Met Tyr Val Phe Lys Thr Gln Leu Val Thr Cys Asp Cys Glu Ile Asp
1 5 10 15

Asn Thr Trp Met His Ser Cys Ser His Arg Ile Gly Asp Met Leu
20 25 30

<210> 5118
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5118
Asp Ser Ile Pro Ala Ala Gly Glu Leu Gly Ile Val Phe Val Ala Phe
1 5 10 15

Phe Ile Leu Asp Glu Val Gln Lys Phe
20 25

<210> 5119
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5119
Met Leu Thr Leu Phe Phe Lys Leu Leu Leu Ile Ser Ala Tyr Tyr Glu
1 5 10 15

Glu His Glu Cys Thr Val His Thr Asn Asn Leu Met Ser His
20 25 30

<210> 5120
<211> 20
<212> PRT
<213> Homo sapiens

<400> 5120
Met Thr Lys Pro Lys Pro Leu Leu Leu Ser Tyr Ile Phe Cys Phe His
1 5 10 15

Val Leu Ser Phe
20

<210> 5121
<211> 50
<212> PRT
<213> Homo sapiens

<400> 5121
Met Pro Thr His Pro Thr Arg Leu Val Leu Leu Leu Pro Ile Asp Gly
1 5 10 15

Glu His Leu Ala Gly Ser Leu Leu Ile Ser Thr Val Leu Leu Gly Pro
20 25 30

Gly Thr Leu Gln Leu Pro Cys Lys Cys Ser Ala Gln Arg Leu Pro Asn
35 40 45

Thr Ser
50

<210> 5122
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5122
Met Ser Leu Leu Leu Ile Asn Arg Met Trp Pro Trp Val Ser Thr Glu
1 5 10 15

Pro Leu Leu Ala Ser Ala Ser Ser Phe Met Trp Glu Phe Ser Ser Thr
20 25 30

<210> 5123
<211> 6
<212> PRT
<213> Homo sapiens

<400> 5123
Met Leu Cys His Phe Phe
1 5

<210> 5124
<211> 232
<212> PRT
<213> Homo sapiens

<400> 5124
Met Pro Ser Leu Trp Asp Arg Phe Ser Ser Ser Ser Thr Ser Ser Ser
1 5 10 15

Pro Ser Ser Leu Pro Arg Thr Pro Thr Pro Asp Arg Pro Pro Arg Ser

```
             20                  25                  30

Ala Trp Gly Ser Ala Thr Arg Glu Glu Gly Phe Asp Arg Ser Thr Ser
          35                  40                  45

Leu Glu Ser Ser Asp Cys Glu Ser Leu Asp Ser Ser Asn Ser Gly Phe
      50                  55                  60

Gly Pro Glu Glu Asp Thr Ala Tyr Leu Asp Gly Val Ser Leu Pro Asp
 65                  70                  75                  80

Phe Glu Leu Leu Ser Asp Pro Glu Asp Glu His Leu Cys Ala Asn Leu
                 85                  90                  95

Met Gln Leu Leu Gln Glu Ser Leu Ala Gln Ala Arg Leu Gly Ser Arg
            100                 105                 110

Arg Pro Ala Arg Leu Leu Met Pro Ser Gln Leu Val Ser Gln Val Gly
        115                 120                 125

Lys Glu Leu Leu Arg Leu Ala Tyr Ser Glu Pro Cys Gly Leu Arg Gly
    130                 135                 140

Ala Leu Leu Asp Val Cys Val Glu Gln Gly Lys Ser Cys His Ser Val
145                 150                 155                 160

Gly Gln Leu Ala Leu Asp Pro Ser Leu Val Pro Thr Phe Gln Leu Thr
                165                 170                 175

Leu Val Leu Arg Leu Asp Ser Arg Leu Trp Pro Lys Ile Gln Gly Leu
            180                 185                 190

Phe Ser Ser Ala Asn Ser Pro Phe Leu Pro Gly Phe Ser Gln Ser Leu
        195                 200                 205

Thr Leu Ser Thr Gly Phe Arg Val Ile Lys Lys Lys Leu Tyr Ser Ser
    210                 215                 220

Glu Gln Leu Leu Ile Glu Glu Cys
225                 230


<210> 5125
<211> 232
<212> PRT
<213> Homo sapiens

<400> 5125
Met Pro Ser Leu Trp Asp Arg Phe Ser Ser Ser Ser Thr Ser Ser Ser
  1               5                  10                  15

Pro Ser Ser Leu Pro Arg Thr Pro Thr Pro Asp Arg Pro Pro Arg Ser
             20                  25                  30

Ala Trp Gly Ser Ala Thr Arg Glu Glu Gly Phe Asp Arg Ser Thr Ser
          35                  40                  45

Leu Glu Ser Ser Asp Cys Glu Ser Leu Asp Ser Ser Asn Ser Gly Phe
      50                  55                  60
```

```
Gly Pro Glu Glu Asp Thr Ala Tyr Leu Asp Gly Val Ser Leu Pro Asp
 65                  70                  75                  80

Phe Glu Leu Leu Ser Asp Pro Glu Asp Glu His Leu Cys Ala Asn Leu
                 85                  90                  95

Met Gln Leu Leu Gln Glu Ser Leu Ala Gln Ala Arg Leu Gly Ser Arg
            100                 105                 110

Arg Pro Ala Arg Leu Leu Met Pro Ser Gln Leu Val Ser Gln Val Gly
        115                 120                 125

Lys Glu Leu Leu Arg Leu Ala Tyr Ser Glu Pro Cys Gly Leu Arg Gly
    130                 135                 140

Ala Leu Leu Asp Val Cys Val Glu Gln Gly Lys Ser Cys His Ser Val
145                 150                 155                 160

Gly Gln Leu Ala Leu Asp Pro Ser Leu Val Pro Thr Phe Gln Leu Thr
                165                 170                 175

Leu Val Leu Arg Leu Asp Ser Arg Leu Trp Pro Lys Ile Gln Gly Leu
            180                 185                 190

Phe Ser Ser Ala Asn Ser Pro Phe Leu Pro Gly Phe Ser Gln Ser Leu
        195                 200                 205

Thr Leu Ser Thr Gly Phe Arg Val Ile Lys Lys Lys Leu Tyr Ser Ser
    210                 215                 220

Glu Gln Leu Leu Ile Glu Glu Cys
225                 230
```

<210> 5126
<211> 36
<212> PRT
<213> Homo sapiens

<400> 5126

```
Met Leu Leu Leu His Leu Thr Leu Gly Leu Leu Pro Gln Ala Val Gln
  1               5                  10                  15

Ser Leu Asn Phe Leu Phe Cys Phe Ile His Leu Thr Leu Gln Ser Leu
             20                  25                  30

His Pro Gln Ala
         35
```

<210> 5127
<211> 28
<212> PRT
<213> Homo sapiens

<400> 5127

```
Met Leu Phe Cys Val Leu Ile Gly Trp Ile Ser Val Cys Leu Ile Leu
  1               5                  10                  15
```

```
Gly Ile Leu Gly Glu Lys Lys Met Val Phe Ser Phe
            20                  25



<210> 5128
<211> 23
<212> PRT
<213> Homo sapiens

<400> 5128
Lys Ala Ala Val Met Trp Gly His Trp Ala Leu Leu Phe Phe Ser Thr
  1               5                  10                  15

Met Cys Met His Phe Gly Ala
            20



<210> 5129
<211> 9
<212> PRT
<213> Homo sapiens

<400> 5129
Met Val Leu Ser Pro Leu Phe Ser Ala
  1               5



<210> 5130
<211> 224
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5130
Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp
  1               5                  10                  15

Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys
            20                  25                  30

Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr
         35                  40                  45

Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn
     50                  55                  60

Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu
 65                  70                  75                  80

Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser
                85                  90                  95

Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser
            100                 105                 110
```

Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr Asn
115 120 125

Gln Trp Ala Val Thr Asn Pro Lys Xaa Val Leu Val Gly Ala Asp Ser
130 135 140

Val Arg Ala Ala Ile Thr Phe Ser Phe Phe Ser Ile Phe Ser Trp Gly
145 150 155 160

Val Leu Ala Ser Leu Ala Tyr Gln Arg Tyr Lys Ala Gly Val Asp Asp
165 170 175

Phe Ile Gln Asn Tyr Val Asp Pro Thr Pro Asp Pro Asn Thr Ala Tyr
180 185 190

Ala Ser Tyr Pro Gly Ala Ser Val Asp Asn Tyr Gln Gln Pro Pro Phe
195 200 205

Thr Gln Asn Ala Glu Thr Thr Glu Gly Tyr Gln Pro Pro Pro Val Tyr
210 215 220

<210> 5131
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5131
Met Glu Gly Thr Gly Ser Gly Asn Gly Arg Tyr Cys Met
1 5 10

<210> 5132
<211> 10
<212> PRT
<213> Homo sapiens

<400> 5132
Met Phe Val Gly Cys Ile Asn Val Phe Phe
1 5 10

<210> 5133
<211> 486
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (200)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5133
Arg Pro Pro Arg Val Arg Ala Thr Lys Met Ala Ala Pro Ile Leu Arg

```
  1               5                  10                  15

Ser Phe Ser Trp Gly Arg Trp Ser Gly Thr Leu Asn Leu Ser Val Leu
            20                  25                  30

Leu Pro Leu Gly Leu Arg Lys Ala His Ser Gly Ala Gln Gly Leu Leu
        35                  40                  45

Ala Ala Gln Lys Ala Arg Gly Leu Phe Lys Asp Phe Phe Pro Glu Thr
    50                  55                  60

Gly Thr Lys Ile Glu Leu Pro Glu Leu Phe Asp Arg Gly Thr Ala Ser
65                  70                  75                  80

Phe Pro Gln Thr Ile Tyr Cys Gly Phe Asp Pro Thr Ala Asp Ser Leu
                85                  90                  95

His Val Gly His Leu Leu Ala Leu Leu Gly Leu Phe His Leu Gln Arg
            100                 105                 110

Ala Gly His Asn Val Ile Ala Leu Val Gly Gly Ala Thr Ala Arg Leu
        115                 120                 125

Gly Asp Pro Ser Gly Arg Thr Lys Glu Arg Glu Ala Leu Glu Thr Glu
    130                 135                 140

Arg Val Arg Ala Asn Ala Arg Ala Leu Arg Leu Gly Leu Glu Ala Leu
145                 150                 155                 160

Ala Ala Asn His Gln Gln Leu Phe Thr Asp Gly Arg Ser Trp Gly Ser
                165                 170                 175

Phe Thr Val Leu Asp Asn Ser Ala Trp Tyr Gln Lys Gln His Leu Val
            180                 185                 190

Asp Phe Leu Ala Ala Val Gly Xaa His Phe Arg Met Gly Thr Leu Leu
        195                 200                 205

Ser Arg Gln Ser Val Gln Leu Arg Leu Lys Ser Pro Glu Gly Met Ser
    210                 215                 220

Leu Ala Glu Phe Phe Tyr Gln Val Leu Gln Ala Tyr Asp Phe Tyr Tyr
225                 230                 235                 240

Leu Phe Gln Arg Tyr Gly Cys Arg Val Gln Leu Gly Gly Ser Asp Gln
                245                 250                 255

Leu Gly Asn Ile Met Ser Gly Tyr Glu Phe Ile Asn Lys Leu Thr Gly
            260                 265                 270

Glu Asp Val Phe Gly Ile Thr Val Pro Leu Ile Thr Ser Thr Thr Gly
        275                 280                 285

Ala Lys Leu Gly Lys Ser Ala Gly Asn Ala Val Trp Leu Asn Arg Asp
    290                 295                 300

Lys Thr Ser Pro Phe Glu Leu Tyr Gln Phe Phe Val Arg Gln Pro Asp
305                 310                 315                 320

Asp Ser Val Glu Arg Tyr Leu Lys Leu Phe Thr Phe Leu Pro Leu Pro
                325                 330                 335
```

Glu Ile Asp His Ile Met Gln Leu His Val Lys Glu Pro Glu Arg Arg
340 345 350

Gly Pro Gln Lys Arg Leu Ala Ala Glu Val Thr Lys Leu Val His Gly
355 360 365

Arg Glu Gly Leu Asp Ser Ala Lys Arg Cys Thr Gln Ala Leu Tyr His
370 375 380

Ser Ser Ile Asp Ala Leu Glu Val Met Ser Asp Gln Glu Leu Lys Glu
385 390 395 400

Leu Phe Lys Glu Ala Pro Phe Ser Glu Phe Phe Leu Asp Pro Gly Thr
405 410 415

Ser Val Leu Asp Thr Cys Arg Lys Ala Asn Ala Ile Pro Asp Gly Pro
420 425 430

Arg Gly Tyr Arg Met Ile Thr Glu Gly Gly Val Ser Ile Asn His Gln
435 440 445

Gln Val Thr Asn Pro Glu Ser Val Leu Ile Val Gly Gln His Ile Leu
450 455 460

Lys Asn Gly Leu Ser Leu Leu Lys Ile Gly Lys Arg Asn Phe Tyr Ile
465 470 475 480

Ile Lys Trp Leu Gln Leu
485

<210> 5134
<211> 388
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5134
Gly His Leu Leu Ala Leu Leu Gly Leu Phe His Leu Gln Arg Ala Gly
1 5 10 15

His Asn Val Ile Ala Leu Val Gly Gly Ala Thr Ala Arg Leu Gly Asp
20 25 30

Pro Ser Gly Arg Thr Lys Glu Arg Glu Ala Leu Glu Thr Glu Arg Val

```
        35                  40                  45

Arg Ala Asn Ala Arg Ala Leu Arg Leu Gly Leu Glu Ala Leu Ala Ala
     50                  55                  60

Asn His Gln Gln Leu Phe Thr Asp Gly Arg Ser Trp Gly Ser Phe Thr
 65                  70                  75                  80

Val Leu Asp Asn Ser Ala Trp Tyr Gln Lys Gln His Leu Val Asp Phe
                 85                  90                  95

Leu Ala Ala Val Gly Xaa His Phe Arg Met Gly Thr Leu Leu Ser Arg
            100                 105                 110

Gln Xaa Val Gln Leu Arg Leu Lys Xaa Pro Glu Gly Met Ser Leu Ala
        115                 120                 125

Glu Phe Phe Tyr Gln Val Leu Gln Ala Tyr Asp Phe Tyr Tyr Leu Phe
    130                 135                 140

Gln Arg Tyr Gly Cys Arg Val Gln Leu Gly Gly Ser Asp Gln Leu Gly
145                 150                 155                 160

Asn Ile Met Ser Gly Tyr Glu Phe Ile Asn Lys Leu Thr Gly Glu Asp
                165                 170                 175

Val Phe Gly Ile Thr Val Pro Leu Ile Thr Ser Thr Thr Gly Ala Lys
            180                 185                 190

Leu Gly Lys Ser Ala Gly Asn Ala Val Trp Leu Asn Arg Asp Lys Thr
        195                 200                 205

Ser Pro Phe Glu Leu Tyr Gln Phe Phe Val Arg Gln Pro Asp Asp Ser
    210                 215                 220

Val Glu Arg Tyr Leu Lys Leu Phe Thr Phe Leu Pro Leu Pro Glu Ile
225                 230                 235                 240

Asp His Ile Met Gln Leu His Val Lys Glu Pro Glu Arg Arg Gly Pro
                245                 250                 255

Gln Lys Arg Leu Ala Ala Glu Val Thr Lys Leu Val His Gly Arg Glu
            260                 265                 270

Gly Leu Asp Ser Ala Lys Arg Cys Thr Gln Ala Leu Tyr His Ser Ser
        275                 280                 285

Ile Asp Ala Leu Glu Val Met Ser Asp Gln Glu Leu Lys Glu Leu Phe
    290                 295                 300

Lys Glu Ala Pro Phe Ser Glu Phe Phe Leu Asp Pro Gly Thr Ser Val
305                 310                 315                 320

Leu Asp Thr Cys Arg Lys Ala Asn Ala Ile Pro Asp Gly Pro Arg Gly
                325                 330                 335

Tyr Arg Met Ile Thr Glu Gly Gly Val Ser Ile Asn His Gln Gln Val
            340                 345                 350

Thr Asn Pro Glu Ser Val Leu Ile Val Gly Gln His Ile Leu Lys Asn
        355                 360                 365
```

Gly Leu Ser Leu Leu Lys Ile Gly Lys Arg Asn Phe Tyr Ile Ile Lys
370 375 380

Trp Leu Gln Leu
385

<210> 5135
<211> 510
<212> PRT
<213> Homo sapiens

<400> 5135
Gln Ala Phe Thr Gly Tyr Lys Arg Tyr Gln Cys Val Tyr Ser Leu Ala
1 5 10 15

Glu Ile Phe Lys Val Leu Ala Ser Phe Tyr Val Ile Leu Val Ile Leu
20 25 30

Tyr Gly Leu Thr Ser Ser Tyr Ser Leu Trp Trp Met Leu Arg Ser Ser
35 40 45

Leu Lys Gln Tyr Ser Phe Glu Ala Leu Arg Glu Lys Ser Asn Tyr Ser
50 55 60

Asp Ile Pro Asp Val Lys Asn Asp Phe Ala Phe Ile Leu His Leu Ala
65 70 75 80

Asp Gln Tyr Asp Pro Leu Tyr Ser Lys Arg Phe Ser Ile Phe Leu Ser
85 90 95

Glu Val Ser Glu Asn Lys Leu Lys Gln Ile Asn Leu Asn Asn Glu Trp
100 105 110

Thr Val Glu Lys Leu Lys Ser Lys Leu Val Lys Asn Ala Gln Asp Lys
115 120 125

Ile Glu Leu His Leu Phe Met Leu Asn Gly Leu Pro Asp Asn Val Phe
130 135 140

Glu Leu Thr Glu Met Glu Val Leu Ser Leu Glu Leu Ile Pro Glu Val
145 150 155 160

Lys Leu Pro Ser Ala Val Ser Gln Leu Val Asn Leu Lys Glu Leu Arg
165 170 175

Val Tyr His Ser Ser Leu Val Val Asp His Pro Ala Leu Ala Phe Leu
180 185 190

Glu Glu Asn Leu Lys Ile Leu Arg Leu Lys Phe Thr Glu Met Gly Lys
195 200 205

Ile Pro Arg Trp Val Phe His Leu Lys Asn Leu Lys Glu Leu Tyr Leu
210 215 220

Ser Gly Cys Val Leu Pro Glu Gln Leu Ser Thr Met Gln Leu Glu Gly
225 230 235 240

Phe Gln Asp Leu Lys Asn Leu Arg Thr Leu Tyr Leu Lys Ser Ser Leu

```
                245                 250                 255

Ser Arg Ile Pro Gln Val Val Thr Asp Leu Leu Pro Ser Leu Gln Lys
            260                 265                 270

Leu Ser Leu Asp Asn Glu Gly Ser Lys Leu Val Val Leu Asn Asn Leu
        275                 280                 285

Lys Lys Met Val Asn Leu Lys Ser Leu Glu Leu Ile Ser Cys Asp Leu
    290                 295                 300

Glu Arg Ile Pro His Ser Ile Phe Ser Leu Asn Asn Leu His Glu Leu
305                 310                 315                 320

Asp Leu Arg Glu Asn Asn Leu Lys Thr Val Glu Glu Ile Ile Ser Phe
                325                 330                 335

Gln His Leu Gln Asn Leu Ser Cys Leu Lys Leu Trp His Asn Asn Ile
            340                 345                 350

Ala Tyr Ile Pro Ala Gln Ile Gly Ala Leu Ser Asn Leu Glu Gln Leu
        355                 360                 365

Ser Leu Asp His Asn Asn Ile Glu Asn Leu Pro Leu Gln Leu Phe Leu
    370                 375                 380

Cys Thr Lys Leu His Tyr Leu Asp Leu Ser Tyr Asn His Leu Thr Phe
385                 390                 395                 400

Ile Pro Glu Glu Ile Gln Tyr Leu Ser Asn Leu Gln Tyr Phe Ala Val
                405                 410                 415

Thr Asn Asn Asn Ile Glu Met Leu Pro Asp Gly Leu Phe Gln Cys Lys
            420                 425                 430

Lys Leu Gln Cys Leu Leu Leu Gly Lys Asn Ser Leu Met Asn Leu Ser
        435                 440                 445

Pro His Val Gly Glu Leu Ser Asn Leu Thr His Leu Glu Leu Ile Gly
    450                 455                 460

Asn Tyr Leu Glu Thr Leu Pro Pro Glu Leu Glu Gly Cys Gln Ser Leu
465                 470                 475                 480

Lys Arg Asn Cys Leu Ile Val Glu Glu Asn Leu Leu Asn Thr Leu Pro
                485                 490                 495

Leu Pro Val Thr Glu Arg Leu Gln Thr Cys Leu Asp Lys Cys
            500                 505                 510
```

<210> 5136
<211> 16
<212> PRT
<213> Homo sapiens

<400> 5136

```
Met Leu Leu Leu Ala Phe Val Thr Ser Phe Phe Tyr Leu Leu Tyr Ser
  1               5                  10                  15
```

<210> 5137
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5137
Met Tyr Leu Pro Val Cys Tyr Ile Leu Leu Leu Ile His Pro Ser Arg
1 5 10 15

Met Gln Ser Trp Leu Thr Tyr Met Ile Arg Tyr Asn Asn Arg Met Ser
20 25 30

Trp Lys Tyr Arg Ser
35

<210> 5138
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5138
Met Leu Ser Ser Ser Arg Ser Leu Ser Phe Ile Met Ser Val Leu Ile
1 5 10 15

Leu Ile Pro Gly Ala Arg Ser Cys Gly Gly Pro Leu Val Ala Gln Asp
20 25 30

<210> 5139
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5139
Met Glu Glu Trp Gly Asn Gly Ser Gly Ile Gly Arg Glu Gly Leu Leu
1 5 10 15

Leu Ile Val Leu Lys Ala Ile Gly Lys Ser Ser Leu Tyr Val Ala Val
20 25 30

Asn Leu

<210> 5140
<211> 22
<212> PRT
<213> Homo sapiens

<400> 5140
Met Glu Val Met Asp Ile Leu Met Ala Leu Ala Thr Asp Thr Val Ile
1 5 10 15

Pro Ser Leu Met Val Leu
20

<210> 5141
<211> 72
<212> PRT
<213> Homo sapiens

<400> 5141
Met Gly Leu Leu Trp Ala Leu Leu Pro Trp Leu Leu Arg Cys Arg Asn
1 5 10 15

Cys Glu Gly Arg Ala Ala Cys His Gly Ala Gln His Arg Ala Gly Leu
20 25 30

Asp Arg Tyr Lys Trp Asn Arg Arg Ile Ser Trp Glu Gly His Arg Glu
35 40 45

Lys Glu Leu Leu Val Thr Ala Leu Ser His Leu Leu Leu Phe Asn Thr
50 55 60

Trp Lys Gly Val Glu Thr Gln Gly
65 70

<210> 5142
<211> 487
<212> PRT
<213> Homo sapiens

<400> 5142
Met Phe Pro Leu Thr Trp Val Phe Leu Ala Leu Tyr Phe Ser Arg His
1 5 10 15

Gln Val Arg Gly Gln Pro Asp Pro Pro Cys Gly Gly Arg Leu Asn Ser
20 25 30

Lys Asp Ala Gly Tyr Ile Thr Ser Pro Gly Tyr Pro Gln Asp Tyr Pro
35 40 45

Ser His Gln Asn Cys Glu Trp Ile Val Tyr Ala Pro Glu Pro Asn Gln
50 55 60

Lys Ile Val Leu Asn Phe Asn Pro His Phe Glu Ile Glu Lys His Asp
65 70 75 80

Cys Lys Tyr Asp Phe Ile Glu Ile Arg Asp Gly Asp Ser Glu Ser Ala
85 90 95

Asp Leu Leu Gly Lys His Cys Gly Asn Ile Ala Pro Pro Thr Ile Ile
100 105 110

Ser Ser Gly Ser Met Leu Tyr Ile Lys Phe Thr Ser Asp Tyr Ala Arg
115 120 125

Gln Gly Ala Gly Phe Ser Leu Arg Tyr Glu Ile Phe Lys Thr Gly Ser
130 135 140

Glu Asp Cys Ser Lys Asn Phe Thr Ser Pro Asn Gly Thr Ile Glu Ser
145 150 155 160

Pro Gly Phe Pro Glu Lys Tyr Pro His Asn Leu Asp Cys Thr Phe Thr
165 170 175

Ile Leu Ala Lys Pro Lys Met Glu Ile Ile Leu Gln Phe Leu Ile Phe
180 185 190

Asp Leu Glu His Asp Pro Leu Gln Val Gly Glu Gly Asp Cys Lys Tyr
195 200 205

Asp Trp Leu Asp Ile Trp Asp Gly Ile Pro His Val Gly Pro Leu Ile
210 215 220

Gly Lys Tyr Cys Gly Thr Lys Thr Pro Ser Glu Leu Arg Ser Ser Thr
225 230 235 240

Gly Ile Leu Ser Leu Thr Phe His Thr Asp Met Ala Val Ala Lys Asp
245 250 255

Gly Phe Ser Ala Arg Tyr Tyr Leu Val His Gln Glu Pro Leu Glu Asn
260 265 270

Phe Gln Cys Asn Val Pro Leu Gly Met Glu Ser Gly Arg Ile Ala Asn
275 280 285

Glu Gln Ile Ser Ala Ser Ser Thr Tyr Ser Asp Gly Arg Trp Thr Pro
290 295 300

Gln Gln Ser Arg Leu His Gly Asp Asp Asn Gly Trp Thr Pro Asn Leu
305 310 315 320

Asp Ser Asn Lys Glu Tyr Leu Gln Val Asp Leu Arg Phe Leu Thr Met
325 330 335

Leu Thr Ala Ile Ala Thr Gln Gly Ala Ile Ser Arg Glu Thr Gln Asn
340 345 350

Gly Tyr Tyr Val Lys Ser Tyr Lys Leu Glu Val Ser Thr Asn Gly Glu
355 360 365

Asp Trp Met Val Tyr Arg His Gly Lys Asn His Lys Val Phe Gln Ala
370 375 380

Asn Asn Asp Ala Thr Glu Val Val Leu Asn Lys Leu His Ala Pro Leu
385 390 395 400

Leu Thr Arg Phe Val Arg Ile Arg Pro Gln Thr Trp His Ser Gly Ile
405 410 415

Ala Leu Arg Leu Glu Leu Phe Gly Cys Arg Ser Gln Met Leu Pro Ala
420 425 430

Pro Thr Cys Trp Gly Cys Ser Gln Ala Ser Leu Gln Thr Pro Arg Ser
435 440 445

```
Pro Pro Leu Pro Pro Arg Asn Thr Ser Gly Ala Pro Val Gln Pro Ala
    450                 455                 460

Trp Ser Ala Ala Ala Arg Ala Gly Ser Leu Glu Ser Leu Arg Pro Ser
465                 470                 475                 480

Pro Val Arg Ser Gly Phe Arg
                485
```

<210> 5143
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5143
```
Met Pro Ile His Arg Phe Ser Val Leu Ala Leu Leu Val Met Pro Pro
  1               5                  10                  15

Leu Met Asn Gly Arg Gln Val Gln Val Lys Glu Trp Cys Phe Trp Asn
             20                  25                  30

Pro
```

<210> 5144
<211> 41
<212> PRT
<213> Homo sapiens

<400> 5144
```
Val Gly Gly Trp Ser Trp Val Trp Ser Pro Trp Leu Ala Ala Phe Val
  1               5                  10                  15

Cys Ala Arg Ala Ala Arg Asp Pro Gly Pro Ser Val Arg Trp Arg Pro
             20                  25                  30

Pro Phe Ala Arg Ser Trp Arg Arg Pro
         35                  40
```

<210> 5145
<211> 26
<212> PRT
<213> Homo sapiens

<400> 5145
```
Asp Val Val Cys Leu Phe Leu Phe Val Tyr Val Leu Ile Lys His Val
  1               5                  10                  15

Asp Tyr Phe Tyr Lys Thr Lys Gly Lys Met
             20                  25
```

<210> 5146
<211> 26

<212> PRT
<213> Homo sapiens

<400> 5146
Met Gly Thr Cys Thr Trp Ala Leu Ser Gly Pro Pro Ser Ser Ala Asp
1 5 10 15

Ser Ala Ser Arg Leu Phe Ser Pro Pro Arg
20 25

<210> 5147
<211> 52
<212> PRT
<213> Homo sapiens

<400> 5147
Met Ile Ile Tyr Val Glu Asn Pro Lys Glu Leu Thr Thr Lys Leu Leu
1 5 10 15

Lys Val Phe Leu Val Leu Ile Ser Gln Leu Ala Arg Leu Lys Asp Thr
20 25 30

Arg Leu Ile His Lys Ser Gln Ser Leu Phe Tyr Met Ala Ser Thr Asn
35 40 45

Glu Thr Arg Ser
50

<210> 5148
<211> 19
<212> PRT
<213> Homo sapiens

<400> 5148
Met Trp Ser Leu Lys Tyr Ser Ser Tyr Lys Ile Phe Val Leu Leu Ile
1 5 10 15

Phe Ala Gly

<210> 5149
<211> 69
<212> PRT
<213> Homo sapiens

<400> 5149
Met Asp Gly Gly Gln Ala Val Pro Thr Leu Leu Gly Gly Ala Gly Leu
1 5 10 15

Gly Gly Val Phe His Cys Val Pro Phe Ser Pro Arg Pro Val Pro Arg
20 25 30

Val Trp Gly Ala Leu Leu Arg Thr Pro Pro Arg Ala Pro Ser Ser Arg
35 40 45

Leu Trp Thr Pro Arg Gln Glu Arg Pro Ser Ala Ala Lys Arg Asn Lys
50 55 60

Ile Leu Ala Ser Arg
65

<210> 5150
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5150
Met Ile Val Leu Ile Cys Val Ile Val Phe Ile Ile Ile Leu Phe Ile
1 5 10 15

Val Leu Phe Ala Thr Gly Ala Phe Ser
20 25

<210> 5151
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5151
Met Lys Ala Val Ile His Gln Lys Tyr Gly Phe Leu His Leu Leu Phe
1 5 10 15

Leu Leu Phe Leu Ser Leu His Arg Ile Ser Ser Ala Thr Phe Thr Leu
20 25 30

Asn Thr Lys Ser Ser Ser
35

<210> 5152
<211> 22
<212> PRT
<213> Homo sapiens

<400> 5152
Phe Leu Phe Phe Gly Val Leu Pro Val Cys Lys Gly Glu Phe Val His
1 5 10 15

Trp Glu Arg Pro Gly Ser
20

<210> 5153
<211> 92
<212> PRT
<213> Homo sapiens

<400> 5153
Met Ala Leu Ala Val Leu Ser Pro Cys Pro Pro Leu Val Gly Thr Ser
1 5 10 15

```
Ala Gly Val Val Leu Val Val Leu Ser Trp Val Leu Cys Leu Gly Val
             20                  25                  30

Phe Ser Tyr Val Lys Val Ala Ala Ser Ser Leu Leu His Gly Gly Gly
         35                  40                  45

Arg Pro Ala Leu Leu Ala Ala Gly Val Ala Ile Gln Val Gly Ser Leu
     50                  55                  60

Leu Gly Ala Val Ala Met Phe Pro Pro Thr Ser Ile Tyr His Val Phe
 65                  70                  75                  80

His Ser Arg Lys Asp Cys Ala Asp Pro Cys Asp Ser
                 85                  90
```

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<210> 5154
<211> 87
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5154
```
Met Asn Gly Arg His Arg Phe Cys Phe Leu Arg Cys Cys Gly Cys Val
  1               5                  10                  15

Phe Ser Glu Arg Ala Leu Lys Glu Ile Lys Ala Glu Val Cys His Thr
             20                  25                  30

Cys Gly Ala Ala Phe Gln Glu Asp Asp Val Ile Val Leu Asn Gly Thr
         35                  40                  45

Lys Glu Asp Val Asp Val Leu Lys Thr Arg Met Glu Glu Arg Arg Leu
     50                  55                  60

Arg Ala Lys Leu Xaa Lys Glu Asn Lys Glu Thr Gln Gly Ser Arg Val
 65                  70                  75                  80

Cys Phe Lys Thr Arg Cys Gln
                 85
```

<210> 5155
<211> 25
<212> PRT
<213> Homo sapiens

<400> 5155
```
Met Cys Trp Val Leu Phe Phe Ser Pro Gly Leu Leu Phe Leu Ser Leu
  1               5                  10                  15

Leu Cys Pro Asp Phe Phe Ser Phe Phe
             20                  25
```

<210> 5156
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5156
Met Arg Cys Phe Leu Phe Leu Leu Gly Gly Ala Arg Phe Ile Cys Gln
1 5 10 15

Leu Ser Thr Val Arg Lys His Phe Gly Ser Pro Leu Ser Asp Ile
20 25 30

<210> 5157
<211> 15
<212> PRT
<213> Homo sapiens

<400> 5157
Met Pro Phe Asn Lys Arg Ser His Ser Pro Ala Ala Leu Cys Pro
1 5 10 15

<210> 5158
<211> 62
<212> PRT
<213> Homo sapiens

<400> 5158
Arg Arg Ala Val Arg Trp Glu Leu Leu Val Leu Leu Leu Leu Leu Leu
1 5 10 15

Pro Thr Leu Arg Arg Pro Gly Pro Arg Cys Arg Pro Gly Pro Gly Cys
20 25 30

Arg Leu Arg Pro Arg Arg Pro Arg Pro Arg Val Arg Pro Ser Gln Asp
35 40 45

Ala Ala Pro Gly Arg Val Ser Thr Ser Trp Pro His Leu Pro
50 55 60

<210> 5159
<211> 22
<212> PRT
<213> Homo sapiens

<400> 5159
Met Ile Gln Trp Phe His Lys Gly Leu Phe Pro Phe Gly Ser Ala Leu
1 5 10 15

Leu Leu Val Ala Ala Met
20

<210> 5160
<211> 405
<212> PRT
<213> Homo sapiens

<400> 5160
Met Gly Phe Cys Leu Ser Ser Leu Leu Ala Trp Cys Val Asp Cys Phe
1 5 10 15

Phe Ser Leu Cys Ser Phe Gly Val Lys Leu Met Asp Phe Gln Ala His
20 25 30

Arg Arg Gly Gly Thr Leu Asn Arg Lys His Ile Ser Pro Ala Phe Gln
35 40 45

Pro Pro Leu Pro Pro Thr Asp Gly Ser Thr Val Val Pro Ala Gly Pro
50 55 60

Glu Pro Pro Pro Gln Ser Ser Arg Ala Glu Ser Ser Ser Gly Gly Gly
65 70 75 80

Thr Val Pro Ser Ser Ala Gly Ile Leu Glu Gln Gly Pro Ser Pro Gly
85 90 95

Asp Gly Ser Pro Pro Lys Pro Lys Asp Pro Val Ser Ala Ala Val Pro
100 105 110

Ala Pro Gly Arg Asn Asn Ser Gln Ile Ala Ser Gly Gln Asn Gln Pro
115 120 125

Gln Ala Ala Ala Gly Ser His Gln Leu Ser Met Gly Gln Pro His Asn
130 135 140

Ala Ala Gly Pro Ser Pro His Thr Leu Arg Arg Ala Val Lys Lys Pro
145 150 155 160

Ala Pro Ala Pro Pro Lys Pro Gly Asn Pro Pro Pro Gly His Pro Gly
165 170 175

Gly Gln Ser Ser Ser Gly Thr Ser Gln His Pro Pro Ser Leu Ser Pro
180 185 190

Lys Pro Pro Thr Arg Ser Pro Ser Pro Pro Thr Gln His Thr Gly Gln
195 200 205

Pro Pro Gly Gln Pro Ser Ala Pro Ser Gln Leu Ser Ala Pro Arg Arg
210 215 220

Tyr Ser Ser Ser Leu Ser Pro Ile Gln Ala Pro Asn His Pro Pro Pro
225 230 235 240

Gln Pro Pro Thr Gln Ala Thr Pro Leu Met His Thr Lys Pro Asn Ser
245 250 255

Gln Gly Pro Pro Asn Pro Met Ala Leu Pro Ser Glu His Gly Leu Glu
260 265 270

Gln Pro Ser His Thr Pro Pro Gln Thr Pro Thr Pro Pro Ser Thr Pro
275 280 285

Pro Leu Gly Lys Gln Asn Pro Ser Leu Pro Ala Pro Gln Thr Leu Ala

290 295 300

Gly Gly Asn Pro Glu Thr Ala Gln Pro His Ala Gly Thr Leu Pro Arg
305 310 315 320

Pro Arg Pro Val Pro Lys Pro Arg Asn Arg Pro Ser Val Pro Pro Pro
325 330 335

Pro Gln Pro Pro Gly Val His Ser Ala Gly Asp Ser Ser Leu Thr Asn
340 345 350

Thr Ala Pro Thr Ala Ser Lys Ile Val Thr Asp Ser Asn Ser Arg Val
355 360 365

Ser Glu Pro His Arg Ser Ile Phe Pro Glu Met His Ser Asp Ser Ala
370 375 380

Ser Lys Asp Val Pro Gly Arg Ile Leu Leu Asp Ile Asp Asn Asp Thr
385 390 395 400

Glu Ser Thr Ala Leu
405

<210> 5161
<211> 17
<212> PRT
<213> Homo sapiens

<400> 5161
Met Ser Ser Leu Leu Leu Ile Ile Ile Leu Ala Leu Ser Leu Ala Tyr
1 5 10 15

Glu

<210> 5162
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5162
Met Arg Ala Phe Ile Trp Thr Cys Gly Thr Trp Thr Leu Trp Ser Leu
1 5 10 15

Ser Asp Arg Ser Leu Gly Ser Ser Arg Ile Cys Met Gly Phe Ala Gly
20 25 30

Ser Leu Lys Arg Pro Gly Arg Thr Lys Ala Xaa Thr Thr Phe Trp Gly
35 40 45

Thr Trp Phe
50

<210> 5163
<211> 60
<212> PRT
<213> Homo sapiens

<400> 5163
Met Ser Pro Thr Gly Leu Leu Val Val Phe Ala Pro Val Val Leu Gly
1 5 10 15

Leu Lys Ala Ile Thr Leu Ala Ala Leu Leu Leu Ala Leu Ala Thr Ser
20 25 30

Arg Arg Ser Pro Gly Gln Glu Asp Val Lys Thr Thr Gly Pro Ala Gly
35 40 45

Ala Met Asn Thr Leu Ala Trp Ser Lys Gly Gln Glu
50 55 60

<210> 5164
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5164
Met Leu Cys Ile Ser Val Phe Cys Leu Leu Met Thr Leu Leu Phe Pro
1 5 10 15

Phe Val Leu Val Val Leu Tyr Xaa Xaa Leu Thr Phe Arg Ser Ser Trp
20 25 30

Gln Tyr Cys Phe Leu His Phe Ile Trp Asp Leu Ser Leu Phe Leu Ile
35 40 45

Asp His Val Cys His Cys
50

<210> 5165
<211> 30
<212> PRT
<213> Homo sapiens

<400> 5165
Met Arg Gly Leu Lys Pro Ser Trp Pro Gln Ala Ser Leu Ser Pro Pro
1 5 10 15

Pro His Ala Leu Pro Cys Pro Cys Arg Val Ala Met Gly Phe
20 25 30

<210> 5166
<211> 44
<212> PRT
<213> Homo sapiens

<400> 5166
Met Asn Asn Thr Cys Leu Ala Val Leu His Val Val Met Cys Leu Ala
1 5 10 15

Trp Ser Phe Leu Trp Ser Leu Leu Leu His Gly Phe Ile His Ser Phe
20 25 30

Phe Ser Phe Ile Ser Ser Cys Ala Val Thr Cys Thr
35 40

<210> 5167
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5167
Met Ser Ser Phe Ser Ser Ala Leu Phe Cys Pro Leu Phe Phe Gly Ser
1 5 10 15

His Phe Phe Leu Ser Ile Trp Val Gln Met Ala Phe Tyr Met Ile Glu
20 25 30

Asn Cys Lys Gly Lys Arg
35

<210> 5168
<211> 17
<212> PRT
<213> Homo sapiens

<400> 5168
Met Met Ala Met Leu Tyr Thr Met Leu Ala Leu Asp Ile Leu Val Cys
1 5 10 15

Gly

<210> 5169
<211> 34
<212> PRT
<213> Homo sapiens

<400> 5169
Met Leu Trp Phe Trp Gly Leu Trp Leu Gln Leu Trp Met Trp Gln Leu

```
  1               5                  10                  15

Trp Val Leu Leu Phe Gly Asn Tyr Pro His Glu Val Pro Arg Ser Cys
             20                  25                  30

Met Leu
```

<210> 5170
<211> 61
<212> PRT
<213> Homo sapiens

<400> 5170

```
Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys Gly Phe
  1               5                  10                  15

Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro Glu Glu
             20                  25                  30

Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn Leu Phe
         35                  40                  45

Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys
     50                  55                  60
```

<210> 5171
<211> 61
<212> PRT
<213> Homo sapiens

<400> 5171

```
Met Pro Thr Thr Val Pro Ser Ser Met Phe Pro Cys Ser Leu Phe Leu
  1               5                  10                  15

Leu Trp Ser Gln Leu Trp Glu Leu Leu Trp Ser Gln Leu Trp Gly Leu
             20                  25                  30

Leu Gln Leu Trp Gly Trp Trp Leu Leu Pro Glu Pro Pro Gln Ala Pro
         35                  40                  45

Ser Leu Pro Pro Ala Pro Ala Pro Glu Pro Arg Leu Leu
     50                  55                  60
```

<210> 5172
<211> 40
<212> PRT
<213> Homo sapiens

<400> 5172

```
Met Thr Ser Met Leu Leu Leu Val Arg Trp Ile Pro Lys Leu Leu Leu
  1               5                  10                  15

Leu Leu Leu Ser Cys Met Ala Pro Gly Tyr Trp Gly Arg Ser Leu Leu
             20                  25                  30
```

Phe Leu Ile Leu Lys Ala Gly Leu
35 40

<210> 5173
<211> 59
<212> PRT
<213> Homo sapiens

<400> 5173
Pro His Leu Pro Leu Met Ile Val Asn Leu Ile Leu His Phe Ser Cys
1 5 10 15

Tyr Cys Trp Cys Lys Lys His Leu Leu Tyr Gln Asp Phe Lys Asn Gln
20 25 30

Ser Asp Lys Ser Leu Ile Ser Leu Ile Ile Ile Thr Asp Lys Ser Ile
35 40 45

Glu Phe Ala Ser Asp Tyr Phe Phe Phe Ser Ser
50 55

<210> 5174
<211> 11
<212> PRT
<213> Homo sapiens

<400> 5174
Met Gly Phe Glu Pro Gly Trp Pro Gly Lys Leu
1 5 10

<210> 5175
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5175
Met Leu Leu Glu Lys Val Ile Arg Leu Arg Cys Ser Cys Phe Val Leu
1 5 10 15

Leu Cys Phe Ser Leu Ser Trp Val Gly Val Ser Ser Ser Asn Asp Val
20 25 30

Gln Val Asp Leu Phe Ser His
35

<210> 5176
<211> 71
<212> PRT
<213> Homo sapiens

<400> 5176
Met Asn Gly Lys Trp Ser Leu Met Cys Ser Val Ser Leu Val Ala Leu

```
  1               5                  10                  15

Gln Leu Thr Val Ala Pro Ala Gly His Pro Ala Gln Asn Ala Gln Lys
             20                  25                  30

Arg Thr Met His Thr Cys Thr Ala Phe Glu Ser His Glu Leu Glu Ala
         35                  40                  45

Val Val Arg Ala Ser Lys Glu Pro Thr Val Trp Cys Ala Val Gly Ile
     50                  55                  60

Trp Arg Gly Arg Gly Pro Gly
 65                  70
```

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<210> 5177
<211> 10
<212> PRT
<213> Homo sapiens

<400> 5177
Met Pro Gly Ala Ser Arg Ser Val Cys Leu
  1   5   10

<210> 5178
<211> 39
<212> PRT
<213> Homo sapiens

<400> 5178
Gly Val Ser Lys Arg Phe Pro Val Ala Ala Thr Arg Thr Ala Trp Tyr
  1   5   10   15

Cys Leu His Val Leu Ser Tyr Phe Cys Phe Ala Leu Leu Gln Leu Leu
             20   25   30

Ala Val Gly Pro Trp Arg Asn
         35

<210> 5179
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5179
Met Trp Pro Leu Arg Leu Leu Cys Thr Ser Trp Ser Phe Leu Arg Ser
  1   5   10   15

Pro Phe Leu Gly Leu Ala Arg Leu Lys Lys Lys Thr Ser Ser Phe
             20   25   30

<210> 5180
<211> 20
<212> PRT

<213> Homo sapiens

<400> 5180
Met Leu His Cys Tyr Pro Ala Leu Pro Ser Leu Ile Phe Leu Gly Val
1 5 10 15

Ala Trp Gly Phe
20

<210> 5181
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5181
Met Phe Thr Tyr Trp Phe Thr Met Leu Phe Met Cys Lys Leu Ser Lys
1 5 10 15

Cys Lys Leu Asn Ile Asn Val His Ala Leu Pro Lys Lys Lys Lys Lys
20 25 30

Xaa Ser Arg Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser Glu Ser Tyr
35 40 45

Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Gly Asn Pro
50 55 60

Gly Val Thr Gln Leu Asn Arg Leu Ala Xaa
65 70

<210> 5182
<211> 13
<212> PRT
<213> Homo sapiens

<400> 5182
Gly Asn Lys Arg Ile Lys Arg Leu Met Pro Tyr Tyr Phe
1 5 10

<210> 5183
<211> 10
<212> PRT
<213> Homo sapiens

<400> 5183

Phe Gly Tyr Phe Gln Ile Tyr Val Phe Ser
1 5 10

<210> 5184
<211> 44
<212> PRT
<213> Homo sapiens

<400> 5184
Met Phe Ser Cys Met Ser Asn Leu Ile Tyr Leu Leu Pro Val Thr Tyr
1 5 10 15

Leu Ile Met Trp Leu Leu Ile Gly Ser His Ser Pro Phe Leu Ser Arg
20 25 30

Tyr Ser Thr Thr Phe Gln Asn Ser His Trp Gln Val
35 40

<210> 5185
<211> 33
<212> PRT
<213> Homo sapiens

<400> 5185
Met Arg Ser Trp Ile Asp Phe Val Ser Ile Tyr Ser Ser Ala Leu Cys
1 5 10 15

Ile Pro Trp Phe Leu His Pro Trp Ile Gln Pro Thr Lys Ala Arg Lys
20 25 30

Tyr

<210> 5186
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5186
Met Pro Cys Trp Val Thr Gly Trp Thr Cys Cys Ser Leu Gln Ser His
1 5 10 15

Ser Gln Pro Ala His Met Pro Pro Ser Lys Arg Ile Leu Leu Phe Thr
20 25 30

Ser Leu Leu Leu Gln Pro
35

<210> 5187
<211> 271
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (211)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (233)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (237)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (270)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 5187

```
Gly Phe Tyr Leu Thr Ala Phe Ile Cys Phe Leu Val Phe Ile Leu Asn
  1               5                  10                  15

Ala Gly Leu Val Trp Phe Phe Pro Trp Arg Glu Ala Lys Pro Gly Ser
             20                  25                  30

Thr Glu Lys Gly Leu Pro Leu Arg Lys Thr His Val Leu Leu Gly Arg
         35                  40                  45

Ser His Asp Thr Val Gln Glu Ala Ala Thr Ser Arg Arg Ala Arg Ala
     50                  55                  60

Ser Lys Lys Thr Ala Gln Pro Trp Val Glu Val Val Leu Ala Leu Arg
 65                  70                  75                  80

Asn Met Lys Asn Leu Leu Phe Ser Glu Met Trp Asp Ile Phe Leu Val
                 85                  90                  95

Arg Leu Leu Met Ala Met Ala Val Met Leu Tyr Tyr Ser Asn Phe Val
            100                 105                 110

Leu Ala Leu Glu Glu Arg Phe Gly Val Arg Pro Lys Val Thr Gly Tyr
        115                 120                 125

Leu Ile Ser Tyr Ser Ser Met Leu Gly Ala Val Ala Gly Leu Ala Leu
    130                 135                 140

Gly Pro Ile Leu Arg Leu Tyr Lys His Asn Ser Gln Ala Leu Leu Leu
145                 150                 155                 160

His Ser Ser Ile Leu Thr Cys Thr Leu Leu Leu Leu Tyr Ser Leu Ala
                165                 170                 175

Pro Thr Met Gly Ala Val Val Leu Ser Ser Thr Leu Leu Ser Phe Ser
            180                 185                 190
```

Thr Ala Ile Gly Arg Thr Cys Ile Thr Asp Leu Gln Leu Thr Val Gly
195 200 205

Gly Pro Xaa Pro Ala Ala Pro Leu Leu Arg Gly Ala Xaa Cys Asp Cys
210 215 220

Ser Gly Pro Ile Ser Pro Ser Leu Xaa Gly Val Ala Xaa Arg Gln Pro
225 230 235 240

Trp Ala Pro Ser Trp Pro Gly Ser Tyr Ala Phe Ile Met Ser Leu Asn
245 250 255

Lys Arg His Ser Ser Gly Asp Gly Asn Ser Lys Leu Lys Xaa Glu
260 265 270

<210> 5188
<211> 38
<212> PRT
<213> Homo sapiens

<400> 5188
Met Leu Gly Ile Ala Thr Val Phe Phe Phe Gly Leu Gly Leu Glu Val
1 5 10 15

Val Gly Lys Asn Ala Cys Gln Pro Ala Leu His Leu Gly Leu Gly Ala
20 25 30

Cys Gln Leu Pro Ala Leu
35

<210> 5189
<211> 18
<212> PRT
<213> Homo sapiens

<400> 5189
Met Gly Asp Leu Lys Leu Val Leu Leu Ile Ser Glu Leu Ile Ile Glu
1 5 10 15

Phe Pro

<210> 5190
<211> 31
<212> PRT
<213> Homo sapiens

<400> 5190
Met Pro Arg Ser Phe Leu Ser Thr Phe Leu Phe Phe Gly Thr Val Arg
1 5 10 15

Gly Phe Thr Leu Ser Ser Trp Thr Ser Leu Pro Gln Ser Trp Asn
20 25 30

<210> 5191
<211> 37
<212> PRT
<213> Homo sapiens

<400> 5191
Leu Pro Phe Leu Ser Leu Cys Cys Ala Met Ser Ser Ser Ser Pro Leu
1 5 10 15

Val Leu Gly Ala Trp Gln Glu Val Ala Ala Ile Gly Cys Phe Leu Asn
20 25 30

Glu Gly Ala Asn Gln
35

<210> 5192
<211> 68
<212> PRT
<213> Homo sapiens

<400> 5192
Met Asp Ser Ala Leu Ala Leu Cys Val Thr Leu Gly Ser Ser Val Pro
1 5 10 15

Leu Ser Val Leu Pro Gln Phe Pro Ser Leu Tyr Asn Val Ala Gly Glu
20 25 30

Gly Glu Asp Gly Thr Arg Leu Asp His Val Ala Ser Glu Val Pro Ser
35 40 45

Arg Ser Asn Tyr Arg Ser Lys Ser Pro Arg Lys Gln Val Ser Lys Ala
50 55 60

Leu Lys Phe Leu
65

<210> 5193
<211> 50
<212> PRT
<213> Homo sapiens

<400> 5193
Met Val Gly Glu Thr Cys Leu Leu Phe His Leu Gly Val Thr Cys Ser
1 5 10 15

Leu Ala Trp Arg Arg Arg Glu Lys Thr Glu Lys Gly Val Ile Pro Asn
20 25 30

Ile Cys Ile Ala Gln Ser His Thr Arg Asp Leu Ile Ser Leu Ala Ile
35 40 45

Leu Cys
50

<210> 5194
<211> 22
<212> PRT
<213> Homo sapiens

<400> 5194
Met Val Met Val Val Val Met Met Ala Val Val Leu Tyr Phe Cys Ala
1 5 10 15

Pro Ser Gly Pro Ser His
20

<210> 5195
<211> 59
<212> PRT
<213> Homo sapiens

<400> 5195
Met Gly Leu Ser Val Leu Leu Pro Leu Cys Leu Leu Gly Pro Gly Arg
1 5 10 15

Phe Thr Ser Gly Gln Lys Pro Leu Asp Thr Pro Gly Leu Gly Ala Ala
20 25 30

Val Leu Ser Val Arg Lys Ala Gly Leu Lys Met Arg Ser His Leu Thr
35 40 45

Pro Ser Val Cys Thr Val Pro Ser Pro Gly Ser
50 55

<210> 5196
<211> 120
<212> PRT
<213> Homo sapiens

<400> 5196
Ala Thr Ala Leu Pro Ser Met Ser Ser Thr Phe Trp Ala Phe Met Ile
1 5 10 15

Leu Ala Ser Leu Leu Ile Ala Tyr Cys Ser Gln Leu Ala Ala Gly Thr
20 25 30

Cys Glu Ile Val Thr Leu Asp Arg Asp Ser Ser Gln Pro Arg Arg Thr
35 40 45

Ile Ala Arg Gln Thr Ala Arg Cys Ala Cys Arg Lys Gly Gln Ile Ala
50 55 60

Gly Thr Thr Arg Ala Arg Pro Ala Cys Val Asp Ala Arg Ile Ile Lys
65 70 75 80

Thr Lys Gln Trp Cys Asp Met Leu Pro Cys Leu Glu Gly Glu Gly Cys
85 90 95

Asp Leu Leu Ile Asn Arg Ser Gly Trp Thr Cys Thr Gln Pro Gly Gly
100 105 110

Arg Ile Lys Thr Thr Thr Val Ser
115 120

<210> 5197
<211> 101
<212> PRT
<213> Homo sapiens

<400> 5197
Val Gln Thr Leu Pro Leu His Pro Pro Gly Leu Pro Ser Ser Ala Ser
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Ser Val Ser Lys Met Glu Pro Pro His Leu Arg Ser Thr Arg Leu Thr
20 25 30

Arg Thr His Ala Pro Pro Ser Ala Leu Ile Lys Pro Thr Asp Pro Asp
35 40 45

Ser Leu Ser Ala Thr Pro Gly Trp Ser Gly Pro Arg Cys Gly Ser Ala
50 55 60

Leu Ser Thr Pro Arg Ala Pro Arg Pro Ser Glu Gly Ala Pro Ala Gly
65 70 75 80

Ala Ser Asp Thr Leu Gln Phe Arg Ala Val Gly Gly Leu Gly His Ile
85 90 95

Pro Val Pro Trp Leu
100

<210> 5198
<211> 32
<212> PRT
<213> Homo sapiens

<400> 5198
Met Leu Ala Ala Val Gly Arg Pro Lys Pro Arg Ser Pro Leu Ser Ser
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Leu Ser Thr Leu Gln Leu Tyr Leu Phe Cys Ser Ser Thr Arg Arg Ser
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<210> 5199
<211> 282
<212> PRT
<213> Homo sapiens

<400> 5199
Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile
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Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser
             20                  25                  30

Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile
         35                  40                  45

Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu
     50                  55                  60

Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val
 65                  70                  75                  80

His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met
                 85                  90                  95

Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn
            100                 105                 110

Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr
        115                 120                 125

Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu
    130                 135                 140

Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn
145                 150                 155                 160

Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln
                165                 170                 175

Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser
            180                 185                 190

Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met
        195                 200                 205

Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser
    210                 215                 220

Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val
225                 230                 235                 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn Ser
                245                 250                 255

Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala Leu
            260                 265                 270

Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys
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<212> PRT
<213> Homo sapiens

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Gln Gly Ile Trp Glu Pro Phe Arg Arg Arg Leu Ser Phe Glu Ala Ser
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Asn Pro Pro Phe Asp Val Gly Arg Pro Phe Asp Leu Arg Arg Ile Val
35 40 45

Gly Ile Ser Ser Glu Gly Asn Leu Asn Thr Leu Ser Cys Asp Pro Gly
50 55 60

His Ser Arg Gly Phe Cys Gly Ala Gly Gly Ser Ser Ser Arg Pro Ser
65 70 75 80

Ala Gly Ser His Lys Gln Cys Gly Pro Ser Val His Pro His Ser Ser
85 90 95

His Ser Asn Arg Asn Ser Ala Asp Val Glu Asn Val Arg Ala Lys Asn
100 105 110

Ser Ser Ser Thr Ser Ser Arg Thr Ser Ala Gln Ala Ala Ser Ser Gln
115 120 125

Ser Ala Asn Lys Thr Ser Pro Leu Val Leu Asp Ser Asn Thr Val Thr
130 135 140

Gln Gly His Thr Ala Gly Arg Lys Ser Lys Gly Ala Lys Gln Ser Gln
145 150 155 160

His Gly Ser Gln His His Ala His Ser Pro Leu Glu Gln His Pro Gln
165 170 175

Pro Pro Leu Pro Pro Pro Val Pro Gln Pro Gln Glu Xaa Gln Pro Glu
180 185 190

Arg Leu Ser Pro Ala Pro Leu Ala His Pro Ser His Pro Glu Arg Ala
195 200 205

Ser Ser Ala Arg His Ser Ser Glu Asp Ser Asp Ile Thr Ser Leu Ile
210 215 220

Glu Ala Met Asp Lys Asp Phe Asp His His Asp Ser Pro Ala Leu Glu
225 230 235 240

Val Phe Thr Glu Gln Pro Pro Ser Pro Leu Pro Lys Ser Lys Gly Lys
245 250 255

Gly Lys Pro Leu Gln Arg Lys Val Lys Pro Pro Lys Lys Gln Glu Glu
260 265 270

Lys Glu Lys Lys Gly Lys Gly Lys Pro Gln Glu Asp Glu Leu Lys Asp
275 280 285

Ser Leu Ala Asp Asp Asp Ser Ser Ser Thr Thr Thr Glu Thr Ser Asn
290 295 300

Pro Asp Thr Glu Pro Leu Leu Lys Glu Asp Thr Glu Lys Gln Lys Gly
305 310 315 320

Lys Gln Ala Met Pro Glu Lys His Glu Ser Glu Met Ser Gln Val Lys
325 330 335

Gln Lys Ser Lys Lys Leu Leu Asn Ile Lys Lys Glu Ile Pro Thr Asp
340 345 350

Val Lys Pro Ser Ser Leu Glu Leu Pro Tyr Thr Pro Pro Leu Glu Ser
355 360 365

Lys Gln Arg Arg Asn Leu Pro Ser Lys Ile Pro Leu Pro Thr Ala Met
370 375 380

Thr Ser Gly Ser Lys Ser Arg Asn Ala Gln Lys Thr Lys Gly Thr Ser
385 390 395 400

Lys Leu Val Asp Asn Arg Pro Pro Ala Leu Ala Lys Phe Leu Pro Asn
405 410 415

Ser Gln Glu Leu Gly Asn Thr Ser Ser Ser Glu Gly Glu Lys Asp Ser
420 425 430

Pro Pro Pro Glu Trp Asp Ser Val Pro Val His Lys Pro Gly Ser Ser
435 440 445

Thr Asp Ser Leu Tyr Lys Leu Ser Leu Gln Thr Leu Asn Ala Asp Ile
450 455 460

Phe Leu Lys Gln Arg Gln Thr Ser Pro Thr Pro Ala Ser Pro Ser Pro
465 470 475 480

Pro Ala Ala Pro Cys Pro Phe Val Ala Arg Gly Ser Tyr Ser Ser Ile
485 490 495

Val Asn Ser Ser Ser Ser Ser Asp Pro Lys Ile Lys Gln Pro Asn Gly
500 505 510

Ser Lys His Lys Leu Thr Lys Ala Ala Ser Leu Pro Gly Lys Asn Gly
515 520 525

Asn Pro Xaa Phe Ala Ala Xaa Thr Ala Xaa Leu Arg Gln Glu Pro Arg
530 535 540

Xaa Gly Met Ala Leu Leu Lys Val Ser Xaa Lys Gln Asn Arg Phe Xaa
545 550 555 560

Xaa Ala Ala Xaa Gly Xaa Xaa Thr Xaa Ser Xaa
565 570

<210> 5201
<211> 317
<212> PRT
<213> Homo sapiens

<400> 5201
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His Glu Gly Ser Phe Lys Ser His Lys Thr Gln Thr Lys Glu Ala Gln

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Glu Ala Glu Ala Phe Ala Leu Tyr His Lys Ala Leu Asp Leu Gln Lys
        35                  40                  45

His Asp Arg Phe Glu Glu Ser Ala Lys Ala Tyr His Glu Leu Leu Glu
    50                  55                  60

Ala Ser Leu Leu Arg Glu Ala Val Ser Ser Gly Asp Glu Lys Glu Gly
65                  70                  75                  80

Leu Lys His Pro Gly Leu Ile Leu Lys Tyr Ser Thr Tyr Lys Asn Leu
                85                  90                  95

Ala Gln Leu Ala Ala Gln Arg Glu Asp Leu Glu Thr Ala Met Glu Phe
            100                 105                 110

Tyr Leu Glu Ala Val Met Leu Asp Ser Thr Asp Val Asn Leu Trp Tyr
        115                 120                 125

Lys Ile Gly His Val Ala Leu Arg Leu Ile Arg Ile Pro Leu Ala Arg
    130                 135                 140

His Ala Phe Glu Glu Gly Leu Arg Cys Asn Pro Asp His Trp Pro Cys
145                 150                 155                 160

Leu Asp Asn Leu Ile Thr Val Leu Tyr Thr Leu Ser Asp Tyr Thr Thr
                165                 170                 175

Cys Leu Tyr Phe Ile Cys Lys Ala Leu Glu Lys Asp Cys Arg Tyr Ser
            180                 185                 190

Lys Gly Leu Val Leu Lys Glu Lys Ile Phe Glu Glu Gln Pro Cys Leu
        195                 200                 205

Arg Lys Asp Ser Leu Arg Met Phe Leu Lys Cys Asp Met Ser Ile His
    210                 215                 220

Asp Val Ser Val Ser Ala Ala Glu Thr Gln Ala Ile Val Asp Glu Ala
225                 230                 235                 240

Leu Gly Leu Arg Lys Lys Arg Gln Ala Leu Ile Val Arg Glu Lys Glu
                245                 250                 255

Pro Asp Leu Lys Leu Val Gln Pro His Ser Phe Leu Ser Ser Pro Gly
            260                 265                 270

Ser Ala Ser Glu Arg Ala Cys Trp Pro Cys Thr Ile Ile Ser Pro Pro
        275                 280                 285

Val Ser Pro His Val Pro Ala Leu Ala Lys Gly Leu Ile Cys Arg Thr
    290                 295                 300

Thr Arg Thr Pro Ala Ser Leu Leu Ser Pro Pro Trp Trp
305                 310                 315
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<212> PRT

<213> Homo sapiens

<400> 5202
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Ser Leu

<210> 5203
<211> 379
<212> PRT
<213> Homo sapiens

<400> 5203
Met Gly Tyr Ala Arg Lys Val Gly Trp Val Thr Ala Gly Leu Val Ile
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Gly Ala Gly Ala Cys Tyr Cys Ile Tyr Arg Leu Thr Arg Gly Arg Lys
20 25 30

Gln Asn Lys Glu Lys Met Ala Glu Gly Gly Ser Gly Asp Val Asp Asp
35 40 45

Ala Gly Asp Cys Ser Gly Ala Arg Tyr Asn Asp Trp Ser Asp Asp Asp
50 55 60

Asp Asp Ser Asn Glu Ser Lys Ser Ile Val Trp Tyr Pro Pro Trp Ala
65 70 75 80

Arg Ile Gly Thr Glu Ala Gly Thr Arg Ala Arg Ala Arg Ala Arg Ala
85 90 95

Arg Ala Thr Arg Ala Arg Arg Ala Val Gln Lys Arg Ala Ser Pro Asn
100 105 110

Ser Asp Asp Thr Val Leu Ser Pro Gln Glu Leu Gln Lys Val Leu Cys
115 120 125

Leu Val Glu Met Ser Glu Lys Pro Tyr Ile Leu Glu Ala Ala Leu Ile
130 135 140

Ala Leu Gly Asn Asn Ala Ala Tyr Ala Phe Asn Arg Asp Ile Ile Arg
145 150 155 160

Asp Leu Gly Gly Leu Pro Ile Val Ala Lys Ile Leu Asn Thr Arg Asp
165 170 175

Pro Ile Val Lys Glu Lys Ala Leu Ile Val Leu Asn Asn Leu Ser Val
180 185 190

Asn Ala Glu Asn Gln Arg Arg Leu Lys Val Tyr Met Asn Gln Val Cys
195 200 205

Asp Asp Thr Ile Thr Ser Arg Leu Asn Ser Ser Val Gln Leu Ala Gly
210 215 220

Leu Arg Leu Leu Thr Asn Met Thr Val Thr Asn Glu Tyr Gln His Met
225 230 235 240

Leu Ala Asn Ser Ile Ser Asp Phe Phe Arg Leu Phe Ser Ala Gly Asn
245 250 255

Glu Glu Thr Lys Leu Gln Val Leu Lys Leu Leu Leu Asn Leu Ala Glu
260 265 270

Asn Pro Ala Met Thr Arg Glu Leu Leu Arg Ala Gln Val Pro Ser Ser
275 280 285

Leu Gly Ser Leu Phe Asn Lys Lys Glu Asn Lys Glu Val Ile Leu Lys
290 295 300

Leu Leu Val Ile Phe Glu Asn Ile Asn Asp Asn Phe Lys Trp Glu Glu
305 310 315 320

Asn Glu Pro Thr Gln Asn Gln Phe Gly Glu Gly Ser Leu Phe Phe Phe
325 330 335

Leu Lys Glu Phe Gln Val Cys Ala Asp Lys Val Leu Gly Ile Glu Ser
340 345 350

His His Asp Phe Leu Val Lys Val Lys Val Gly Lys Phe Met Ala Lys
355 360 365

Leu Ala Glu His Met Phe Pro Lys Ser Gln Glu
370 375

<210> 5204
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<212> PRT
<213> Homo sapiens

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Met Val Leu Ser Pro Leu Phe Ser Ala
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<210> 5205
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<212> DNA
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<212> DNA
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<400> 5266

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<213> Homo sapiens

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EP 2 264 059 A2

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Application Number 09/826,359

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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 84
<212> DNA
<213> Homo sapiens

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<211> 2107
<212> DNA
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EFS-Web Upload

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 233
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 102
<212> DNA
<213> Homo sapiens

<400> 5369
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tgcccctcaa tacaacttac taatctctgc ctcagtttct ccatctgtga aagtggtgta 1380
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aaataaagaa tgatataaag cattg 1465

10/534,259

<210> 5391
<211> 1465
<212> DNA
<213> Homo sapiens

<400> 5391
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gagaagttat ttctttccct tgcgctccaa tttttctcta gacagttggt atccacaatt 480
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cgtgcccctt ttataaaaat tcatgcatgg aatcctacat tattatgcat caaaatctcc 600
agaaatgtct taggattttt gcagggagaa tattaaatgc attgttttgc tttgttttga 660
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tgcccctcaa tacaacttac taatctctgc ctcagtttct ccatctgtga aagtggtgta 1380
atacttatct acctcccttg aatgttgtga agattagtat atgttggtaa agcactttta 1440
aaataaagaa tgatataaag cattg 1465

<210> 5392
<211> 1464
<212> DNA
<213> Homo sapiens

<400> 5392
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accttgtttg ttggagagaa gggataagat tttaaagcta catgtctgaa agaatgatgc 120
tgctgattga aataaaggaa gaaaggatgc atttcgggct ccaacctgtc taggaaggct 180
tagacctcaa acaccatcac ctccatgcat ttcctctttg gctactatgt cttttccctg 240
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tgcagctggt gggatgtcag tcaccatctc ttatatttgc ttcccactag aaagatcaag 420
agaagttatt tctttccctt gcgctccaat ttttctctag acagttggta tccacaattt 480
taaaaaatgt tccatgttgt ataaacaagc attcgctgag aggggctgtt aatacacatc 540
gtgccccttt tataaaaatt catgcatgga atcctacatt attatgcatc aaaatctcca 600
gaaatgtctt aggatttttg cagggagaat attaaatgca ttgttttgct ttgttttgaa 660
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tacttatcta cctcccttga atgttgtgaa gattagtata tgttggtaaa gcacttttaa 1440
aataaagaat gatataaagc attg 1464

<210> 5393
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5393
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aatttagttt ttaccaaatg gacccttta gagaaagaag catcaggata aagtcccaat 120
cttcagtggt ttgtggaaga gagaatctga tgattcatgc cctcctaccc tgttagaatt 180
aggacaggga atggcagacc ctaaacatac atgtgaactg agcaaagatt gcctttgctt 240
cacctattga cacatttaag aacctcgttt tatagagagt acggagtggg gtctgagatt 300
ctacatttct tacaagttcc tggtttatgc cagttctgtt tgtctggtca ccacacttct 360
gaatagcaag gtttcagagg actctatgaa gtttttattt ctcaaaaatt tggcttaggt 420
acatctttac atacagtggt gctagatatt attctttcag aacttaacca tgcaacaatg 480
cagaagaata caaaaaatgc ttgcacacag tagtgtattt taatggaact ataaaagcat 540
tgaactgatt cctaacttta catat 565

<210> 5394
<211> 565
<212> DNA
<213> Homo sapiens

<400> 5394
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aatttagttt ttaccaaatg gacccttta gagaaagaag catcaggata aagtcccaat 120
cttcagtggt ttgtggaaga gagaatctga tgattcatgc cctcctaccc tgttagaatt 180
aggacaggga atggcagacc ctaaacatac atgtgaactg agcaaagatt gcctttgctt 240
cacctattga cacatttaag aacctcgttt tatagagagt acggagtggg gtctgagatt 300
ctacatttct tacaagttcc tggtttatgc cagttctgtt tgtctggtca ccacacttct 360
gaatagcaag gtttcagagg actctatgaa gtttttattt ctcaaaaatt tggcttaggt 420
acatctttac atacagtggt gctagatatt attctttcag aacttaacca tgcaacaatg 480
cagaagaata caaaaaatgc ttgcacacag tagtgtattt taatggaact ataaaagcat 540
tgaactgatt cctaacttta catat 565

<210> 5395
<211> 240
<212> DNA
<213> Homo sapiens

<400> 5395
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taaaaataca aaaaattacc cgggcgtggt ggcgggcacc tgtagtccca gctactcggg 120
aggctgaggc aggagaatgg tgtgaaccca ggagacggag cttgcaatga gccgagatcg 180
cgccactgca ctctagcctg ggcgacagag caagactccg tctcaaaaac aaaaaaaaaa 240

<210> 5396
<211> 1275
<212> DNA
<213> Homo sapiens

<400> 5396

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ttaaagaaaa aagtgaaaat aaatatgcat ggatacttgg atttttcttt tagtaacaaa 120
gatatttaaa ttatttgtat acacacacac acacacacac acacacacac acacgtatct 180
gtacctagaa atgtttatag gggaggtcag ttttctgaag attaaatgca gccctaatgt 240
cagattaatg ttataaacac atcgtttaat cacaagtttt cagagagcag gctccacaga 300
tagtctctaa ctttctatca ttacaaatcg ctatttttat atcattgcta atttaaataa 360
taaagtaaat tatgaagagg aatcattggt tgcaagtcac catgggagtt tagtccctgt 420
gaaaatataa agcatttaaa taatttgtat tcttttacca ttttttatta catctcttta 480
atttttgtca cttgaatata ttaggatgat gatgatacta taatcactgg aacaaagaca 540
tttgcttgga catcttttct tttttccccc atttttgttc tgttaataat ttttaactat 600
agcttttcct ttcttgtcct tatctgtccc ttatcgatca tagatagttt cactactatt 660
tttaagtttt tattgttaaa ttgaagatga atctgtacag ttacttgtga attaagatgc 720
agctaagtta aaatcaagta taattttgaa gctgatttta catttaacta gatgattaaa 780
tatatttttt caggtgcttc ttcaatttaa atcaagtttt atggtttcag caaaatttag 840
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aattagccgg gcgtagtggc gggcgcctgt agtcccagct acttgggagg ctgaggcagg 1140
agaatagcgt gaacccggga ggcggagctt gcagtgagcc gagatcccgc cactgcactc 1200
cagcctgggc gacagagcga gactccgtct caaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaaaaa aaaaa 1275

<210> 5397
<211> 242
<212> DNA
<213> Homo sapiens

<400> 5397
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aaatacaaaa aattagccgg gcgaggtggc gggcgcctgt agtcccagct actcgggagg 120
ctgaggcagg agaatggcgt gaaccccagg gggcggagcc tgcagtgagc cgagattgcg 180
ccactgcact ccagcctggg cgacagcgag actccgtctc aaaaaaaaaa aaaaaaaaag 240
gc 242

<210> 5398
<211> 90
<212> DNA
<213> Homo sapiens

<400> 5398
gatcgcgcca ctgcactcca gcctgggcgg cagagagaga ctccgtctca aaaaaaaaaa 60
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 90

<210> 5399
<211> 181
<212> DNA
<213> Homo sapiens

<400> 5399
aattagccgg gcgtggtggc aggcgcctgt agtcccagct acttgggagg ctgaggcagg 60
agaatggcgt gaaccaggga ggcggagctt gcagtgagct gagatcgcgc cactgcactc 120
cagcctgggc gacagggcaa gactccgtct caaaaaaaaa aaaaaaaaaa aaaaaattgt 180
g 181

<210> 5400
<211> 142

<212> DNA
<213> Homo sapiens

<400> 5400
cgggcgcctg tagtcccagc tactcgggag gctgaggcag gagaatggcg tgaacccagg 60
aggtggagct tgcagtgagc cgagattgtg ccactgaact ccagcctggg cgacagagcg 120
agactctgtc tcaaaaaaac aa 142

<210> 5401
<211> 295
<212> DNA
<213> Homo sapiens

<400> 5401
ggccgggtgc agtggctcac acctgtaatc ccagcacttt gggaggctga ggtgggcaga 60
gcacgaggtc aggagatcga gaccatcctg gctaacacgg tgaaacccca tctctactaa 120
aaatacaaaa aattagccag gcgtggtggc gggtgcctgt agtcccagct actcgggagg 180
ctgaggccag agaatggcgt gaacccggga ggcggagctt ccagtgagcc gagatcatgc 240
cactgcactc cagcctgggc aacagagcga gactccgtct caaaaaacaa aacaa 295

<210> 5402
<211> 319
<212> DNA
<213> Homo sapiens

<400> 5402
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ggatcatgag gtcaggagat cgagaccatc ctggctaaca cagtgaaacc ccgcctctac 120
taaaaataca aaaaattagc cgggcgtggt ggcgggcgcc tgtagtccca gctactcggg 180
aggctgaggc gggagaatgg cgtgaacccg ggaggcggag cttgcagtga gccgagatcg 240
cgccactgca ctccagcctg ggcgacagag cgagactccg tctcaaaaaa aaaaaagaaa 300
aaaaaaaaaa agagcacaa 319

<210> 5403
<211> 316
<212> DNA
<213> Homo sapiens

<400> 5403
gaattcttgg ccgggcacgg tggctcacgc ctgtaatccc agcactttgg gaggccgagg 60
cgggcggatc acgaggtcag gagatcgaga ccatcctggc taacacggtg aaaccccgtc 120
tctactaaaa atacaaaaaa ttagccgggc gtggtagcgg gcgcctgtag tcccagctac 180
tcgggaggct gaggcaggag aatggcgtga acctggcagg cggagcttgc agtgagccga 240
gatcgcgcca ctgcactcca gcctgggtga cagagcgaga ctccgtctca aaaaaaaaaa 300
aaaaaaaaaa gaattc 316

<210> 5404
<211> 102
<212> DNA
<213> Homo sapiens

<400> 5404
gaggttgcag tgagctgaga tcacgccact gcactccagc ctgggtgaca gagcaagact 60
ccatctcaaa aaaaaaaaaa aaaaaaaaaa aaactaataa tc 102

<210> 5405

<211> 322
<212> DNA
<213> Homo sapiens

<400> 5405
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ggccgaggcg ggcggatcac gaggtcagga gatcgagacc atcccggcta aaacggtgaa 120
accccgtctc tactaaaaat acaaaaaatt agccgggcgt agtggcgggc gcctgtagtc 180
ccagccactt gggaggctga ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag 240
cgagccgaga tcccgccact gcactccagc ctgggcgaca gagcgagact ccatctcaaa 300
aaaaaaaaaa aaaaaaaaaa aa 322

<210> 5406
<211> 286
<212> DNA
<213> Homo sapiens

<400> 5406
cactttggga ggcccaggcg ggcggatccc gaggtcagga gatccagacc atcctggcta 60
acacggtgaa accccgtctc tactaaaaat accaaaaatt agcccggcgt ggtagcgggc 120
gcctgtagtc ccagctactc gggaggctga ggcaggagaa tggcgtgaac ccgggaggcg 180
gagcttgcag tgagccgaga tcgcgccact gcactccagc ctgggcgaca gagcgagact 240
ccgtctcaaa aaaaaaaaaa aaagaaaaga aaaaaaaaaa aaaaga 286

<210> 5407
<211> 305
<212> DNA
<213> Homo sapiens

<400> 5407
gggcgcggtg gctcacgcct gtaatcccag cactttggga ggccgaggcg ggcggatcac 60
gaggtcagga gatcgagacc atcccagcta aaacggtgaa accccgtctc tactaaaaat 120
acaaaaaatt agccgggcgt agtggcgggc acctgtagtc ccagctactt gggaggctga 180
ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga tcccgccact 240
gcactccagc ctgggcgaca gagcgagact ccgtctcaaa aaaaaaaaaa aaaaaaaaaa 300
agaaa 305

<210> 5408
<211> 284
<212> DNA
<213> Homo sapiens

<400> 5408
gctcacacct gtaatcccac actttgggag gccaaggtgg gcagatcacg aggtcaggag 60
atcgagacca tcctggccaa cacggtgaaa ccccatctct actaaaaata caaaaaatta 120
gccgggcgtg gtggcaggca cctgtagtcc caactacttg ggaggctgag gcaggagaac 180
agcgtgtacc caggaggcgg agcttgcagt gagccaagat tgcgccactg cactccagcc 240
tgggcgacag agggagactc cgtctcaaaa aaaaaaaaaa aaga 284

<210> 5409
<211> 316
<212> DNA
<213> Homo sapiens

<400> 5409
aatttgttca attcggccgg gcgcggtggc tcacgcctgt aatcccagca ctttgggagg 60
ccgaggcggg cggatcacga ggtcaggaga tcgagaccat cccggctaaa acggtgaaac 120

cccgtctcta ctaaaaatac aaaaaattag ccgggcgtag tggcgggcgc ctgtagtccc 180
agctacttgg gaggctgagg caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg 240
agccgagatc ccgccactgc actccagcct gggcgacaga gcgagactcc gtctcaaaaa 300
aaaaaaaaaa aatttg 316

<210> 5410
<211> 283
<212> DNA
<213> Homo sapiens

<400> 5410
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agaccatcct ggctaacacg gtgaaacccc gtctctacta aaaatacaaa aaattagcca 120
ggcgtggtgg cgggggcctg tagtcccagc tactcgggag actgaggcag gagaatggcg 180
tgaacccggg aggtggagcc tgcagtgagc cgagatcgcg ccactgcact ccagcctggg 240
cgacagagcc agactccatc tcaaaaaaaa aaaaaaaaaa aaa 283

<210> 5411
<211> 93
<212> DNA
<213> Homo sapiens

<400> 5411
aggcggagtt tgcagtgacc ggagatcgcg ccactgcact ccagcctggg tgacagagca 60
agactctgtc tcaaaaaaaa aaaaaaaaaa aaa 93

<210> 5412
<211> 293
<212> DNA
<213> Homo sapiens

<400> 5412
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ggagatcgag accatcctgg ctaacacggt gaaaccccgt ctctactaaa aatacaaaaa 120
attagctggg tgtggtggcg ggcgcctgta gtcacagcta cttgggagac tgaggcagga 180
gaatggcatg aacccgggag gtgcagcttg cagtgagcag agatctcgcc actgcactcc 240
agcctgggcg acagagcgag acttcatctc aaaaaaaaaa agaaagaaag taa 293

<210> 5413
<211> 295
<212> DNA
<213> Homo sapiens

<400> 5413
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ggagattgag accatcctgg ctaatatggt gaaaccccgt ctctactaaa aatacaaaaa 120
aattagccgg gcgtggtggc acacgcctgt aatcccagct acttaggagg ctgaggcagg 180
agaatggtgt gaacccggga ggcggagctt gcagtgagcc gagttcgggc cactgcactc 240
cggcctgggc aacagagcga gactccgtct caaaaaaaaa aaaaaaaaaa aaaaa 295

<210> 5414
<211> 170
<212> DNA
<213> Homo sapiens

<400> 5414

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gaggcggagc ttgcagtgag ccgagatccc gccactgcac tccagcctgg gcgacagagc 120
gagactccgt ctcacaaaat aaaaaaaaaa taaaataaaa taaaataaaa 170

<210> 5415
<211> 109
<212> DNA
<213> Homo sapiens

<400> 5415
ggcgtgaacc caggaggcgg agcttgcagt gagatgagat cgcgccactg cactccagcc 60
tgggcgacag agcaagactc catctcaaaa aaaaaaaaaa aaaaaggac 109

<210> 5416
<211> 263
<212> DNA
<213> Homo sapiens

<400> 5416
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ggctaacaca gtgaaacccc atctctacta aaaatacaaa aaattatcca ggcgtggtgg 120
cgggcacctg tggtcccagc tacttgggag gctgaggcag gagaatggcg tgaacctggg 180
aggcggagct tgcagtgagc cgagatggcg ccactgcacc ccagcctggg tgacagagcg 240
agacacggtc tcaaaaaaaa aaa 263

<210> 5417
<211> 300
<212> DNA
<213> Homo sapiens

<400> 5417
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aggtcaggag atccggacca tcctggctaa catggtgaaa ccccgtctct actaaaaata 120
caaaaaaatt agccaggcgt ggtggctggc gcctgtagtc ccagctactc gggaggctga 180
ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga tcgcgccact 240
gcactccagc ctgggcgaca gagcaagact ccgtctcaaa aaaaaaaaaa aagtgcaaac 300

<210> 5418
<211> 226
<212> DNA
<213> Homo sapiens

<400> 5418
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gggcgtggtg gcgggcgcct gtagtcccag ctactcagga ggctgagaca ggagaatggc 120
gtgaacccgg gaggcggagc ttgcagtgag ccgagatcgc gccactgcac tccagcctgg 180
gccacagagt gaaactcagt ctcaaaaaaa caaacaaaca aacaaa 226

<210> 5419
<211> 306
<212> DNA
<213> Homo sapiens

<400> 5419
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cggatcacga ggtcaggaga tcgagaccat cccggctaaa acggtgaaac ccgtctctac 120

taaaaataca aaaaattagc cgggcgtagt ggcgggcgcc tgtagtccca gctacttggg 180
aggctgaggc aggagaatgg cgtgaacccg ggaggcggag cttgcagtga gcggagatcc 240
cgccactgca ctccagcctg ggcggcagag cgagactccg tctcaaaaaa aaaaaataat 300
aataat 306

<210> 5420
<211> 294
<212> DNA
<213> Homo sapiens

<400> 5420
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ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccatctcta ctaaaaatac 120
aaaaaattag ccgggcgagg tggcgggtgc ctgtagtccc agctactcgg gaggctgagg 180
caggagaatg gcgtgaaccc gggaagcgga gcttgcagtg agccgagatt gcgccattgc 240
actccagcct gggtgacagc gagactccgt ctcaaaaaaa aaaaaaaaag aagt 294

<210> 5421
<211> 184
<212> DNA
<213> Homo sapiens

<400> 5421
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aacctgggag gcggagcttg cagtgagccg agatcgcgcc actgcactcc agcctgggcg 120
acagagcgag agtccgtctc aaaaaaaaaa aaaaaaaaga aaagaaaaaa gaacaaacaa 180
cagc 184

<210> 5422
<211> 305
<212> DNA
<213> Homo sapiens

<400> 5422
tggctaggca cggtggctca cgcctggagt cccagcactt tgggaggccg aggcgggcag 60
atcacgaggt caggagatcg agaccatcct ggctaacacg gtgaaaccct gtctctacta 120
aaaatacaaa aaattagcca ggcgtggtgt cgggcgcctg taatcccagc tactcgggag 180
gctgaggcag gagaatggca tgaacccggg aggcggagct tgcagtgagc ggagatggca 240
ccactgcact ccagcctggg caacagagcg agactccgtc ccaaaaaaaa aaaaaaaaaa 300
aaaca 305

<210> 5423
<211> 258
<212> DNA
<213> Homo sapiens

<400> 5423
ccgaggcggg cggatcacga ggtcaggaga tcgagaccat cctggctaac acggtgaaac 60
cccgtctcta ctaaaaaaaa caaaaaatta gccaggcgtg tggcggcacc ctgcagtccc 120
agctacttgg gaggctgagg caagagaatg gcgtgaaccc ggaaggcgga gcttgcagtg 180
agccgagatc gcgccactgc actccagcct gggcgacaga gcgagctccg tctcaaaaaa 240
aaaaagaata aaaatgga 258

<210> 5424
<211> 299
<212> DNA

<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (27)
<223> n equals a,t,g, or c

<400> 5424
taatcccagc actttggnag gccgagncgg gcggatcacg aggtcaggag atcgagacca 60
tcccggctaa aacggtgaaa ccccgtctct actaaaaata caaaaaatta gccgggcgta 120
gtggcgggcg cctgtagtcc cagctacttg ggaggctgag gcaggagaat ggcgtgaacc 180
cggaaggcgg agcttgcagt gagccgagat cccgccactg cactccagct tgggcgacag 240
agcgagactc cgtctcaaaa aaaaaaaaaa aaacaaaaca aacaaacaaa aaaaaacaa 299

<210> 5425
<211> 147
<212> DNA
<213> Homo sapiens

<400> 5425
ggtcccagct actcgggagg cttaggcagg agaatggcgt gaacccagga ggtggagctt 60
gcagtgagcc gagatcgcgc cactgcactc cagcctgggc gacagagcga gactccatct 120
caaaaaaaaa aaaaaaaaaa aattgtg 147

<210> 5426
<211> 312
<212> DNA
<213> Homo sapiens

<400> 5426
acaccaggcc gggcacggtg gctcatgcct gtaatcccag cactttggga ggccgagacg 60
ggcggatcac gaggtcagga gatcaagacc aacctggcta acacggtgaa accccgtctc 120
tactaaaaat acaaaaaatt agccgggcgt ggtggcggtt tgccttttgt cccagctact 180
cgggaggctg aggcaagaca atggcgtgac cctgggaggc ggagcttgca gtgagctgag 240
atcgcgccac tgcactccac cctgggtgac agagcgagac tccgtctcaa aaaaaaaaaa 300
aaaaaaaaaa aa 312

<210> 5427
<211> 169
<212> DNA
<213> Homo sapiens

<400> 5427
aaaattagcc aggcgtgatg gtgggtgcct gtagtcccag ctacttggga ggctgaggca 60
ggagaatggc gtgaacccag gaggtggagc ttgcagtgag ctgagatcgc gccactgcac 120
tccagcctgg gcgacagagt gagactccat ctcaaaaaaa aaaaaaaga 169

<210> 5428
<211> 278
<212> DNA
<213> Homo sapiens

<400> 5428
cccacacttt gggaggccga ggcaggcaga tcacgaggtc aggagatcga gaccatcttg 60
gctaacatgg tgaaaccccg tctctactaa acaaaataca aaaaattagc cgggcgtgat 120
ggcgggcgcc tgtggtccca gctactcggg aggctgaggc aggagaatgg catgaacccg 180
ggaggcagag cttgcagtga gccgagatcg cgccactgca ctccagcctg ggtgacagag 240
tgagactccg tctcaaaaaa aaaaaaaaaa aaaaaaaa 278

<210> 5429
<211> 316
<212> DNA
<213> Homo sapiens

<400> 5429
tcagccggcg cggtggctca cgcctgtaat cccagcactt tgggaggccg aggcgggcgg 60
atcacgaggt caggagatcg agaccatccc ggctaaaacg gtgaaacccc gtctctacta 120
aaaatacaaa aaattagccg ggcgtagtgg cgggcgcctg tggtcccagc tacttgggag 180
gctgaggcag gagaatggcg tgaacccggg aggcggagct tgcagtgagc cgagatcccg 240
ccactgcact ccagcctggg cgacagagcg agactccgtc tcaaaaaaaa ataaaataaa 300
ataaaaaaaa agaata 316

<210> 5430
<211> 293
<212> DNA
<213> Homo sapiens

<400> 5430
tggctcacgc ctgtaatccc agcactttgg gaggccaagg cgggcagatc atgaggtcag 60
gaaatcgaga ccatcctggt taacaaggta aaaccccgtc tctactaaaa atacaaaaaa 120
ttagccaggt gtggtggcgg gcgcctgtaa tctcagctac ttgggaggct gaggcaggag 180
aacggcgtga acctgggagg cggagcttgc agtgagccga gattgcgcca ctgcactcca 240
gcctggggga cagaccgaga ctctgtctca aaaaaaaaaa aaaaaaaaaa aaa 293

<210> 5431
<211> 207
<212> DNA
<213> Homo sapiens

<400> 5431
attaaaaccc catctctact aaaaatacaa aaaattagct gggcgtgggt ggcaggcgcc 60
tgtagtccca gctactctgg aggctgaggc aggagaatgg catgaacctg ggaggcggag 120
cttgcagtga gccgagattg cgccactgca ctccagcctg ggtgacagag cgagactctg 180
tctcaaaaaa aaaaaaaaaa agaaata 207

<210> 5432
<211> 131
<212> DNA
<213> Homo sapiens

<400> 5432
ggaggctgag gcaggagaat ggcgtgaacc caggaggcgg agcttgcagt gagctgagat 60
tgcgccactg cactccagcc tgggcaacag agcgagactc cgtctgaaaa aaaaaaaaac 120
aaaaactggt g 131

<210> 5433
<211> 188
<212> DNA

<213> Homo sapiens

<400> 5433
ttaaaaatac aaaaaattag ctgggcgtgg tggcgggtgc tgtagtccca gctactcagg 60
aggctgaggc aggagaatgg cgtgaaccca ggaggcggag attgcagtga gccgagatcg 120
caccactgca ctccagcctg ggcaacagag cgagactccg tctcaaaaaa agaaaaaaaa 180
aagaaagt 188

<210> 5434
<211> 241
<212> DNA
<213> Homo sapiens

<400> 5434
ggcggatcac gaggtcagga gattgagatc atcctggcta acacggtgaa accccgtctc 60
tactaaaaaa tacaaaaaat tagccgggcg tggtggtggg cgcctgtagt cccagctact 120
tgggaggctg aggcaggaga atggtgtgaa cccgggaggc agagcttgca gtgagctgag 180
atcatgccac tgcactgtag ccagggtgac agagtgagac tccatctcaa aaaaaaaaaa 240
a 241

<210> 5435
<211> 160
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (82)
<223> n equals a,t,g, or c

<400> 5435
ggtgggcgcc tgtagtccca gctactcggn aggctgaggc aggagaatgg cgtgaaccca 60
ggaggcggag cttgcagtga gntgagatcg cgccccctgc actccagcct gggtgacaga 120
gcgagactct gtctcaaaaa aaaaaaaaaa aaaaaaaagt 160

<210> 5436
<211> 227
<212> DNA
<213> Homo sapiens

<400> 5436
taagaccatc ctggctaaca cggtgaaacc ccgtctctac taaaaataca aaaattagcc 60
aggcgtggtg gcgggcgcct gtagtcccag ctacttggga ggctgaggca ggagaatggc 120
atgaacccgg gaggtggagc ttgcagtgag ctgagatcgc gccactgcac tccagcctgg 180
gcaacagagc gagactctgt ctcaaaaaaa aaaaaaaaaa tcaagta 227

<210> 5437
<211> 68
<212> DNA
<213> Homo sapiens

<220>

<221> SITE
<222> (28)
<223> n equals a,t,g, or c

<400> 5437
cgcgccactg cactccagcc tgggcganca gagcaagact ccatctcaaa aagaaaaaaa 60
aaaaaaaa 68

<210> 5438
<211> 235
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (230)
<223> n equals a,t,g, or c

<400> 5438
agatggagcc catcctggct aacacggtga aaccccgtct ttactaaaaa tacaaaaaat 60
tagccgggcg tggtggcgga cgcctgtagt cccagctact cgggaggctg aggcaggaga 120
atggcgtgaa cccgggaggc ggagcttgca gtgagccgag atcgcgccac tgcactccag 180
cctgggcgac agagcgagac tccgtctcaa aaaaaaaaaa aaaaaaaaan aataa 235

<210> 5439
<211> 268
<212> DNA
<213> Homo sapiens

<400> 5439
ttgcgggggc ccaggcaggc ggatcacgag gtcaggagat tgagaccatc ctggctaaca 60
cggtgaaacc ccgtctctac taaaaataca aaaagattag ctgggcgtgg tggcgggcgc 120
ctgtagtccc agctacttgg gagactgagg cagaagaacg gcgtgaatct gggaggcgga 180
gcttgcagtg agccgagatc acaccacagc actccagctt gggcgacaga gcgagactcc 240
gtctcaaaaa aaaaaaaaaa aaaaaaga 268

<210> 5440
<211> 127
<212> DNA
<213> Homo sapiens

<400> 5440
tgaggcagga gaatcgcttg aacccgggag gcagaggttg cagtgagcca agatcacgcc 60
actgcactcc agcctgggcg acagaatgag actccatctc aaaaaaaaaa aaaaaaaaaa 120
aaaaaag 127

<210> 5441
<211> 187
<212> DNA
<213> Homo sapiens

<400> 5441
cccatctcta ctaaaaatac aaaaaattag ccaggcgtgg tggcgggcgc ctgtagtccc 60
agctacttgg gaggctgagg caggagaatg gtgtgaaccc gggaggcgga gcttgcagtg 120
agccgagatc gcgccactgc gctccagcct gggcgacaga gcgaaactcc gtctaaaaaa 180
aaaaaaa 187

<210> 5442
<211> 298
<212> DNA
<213> Homo sapiens

<400> 5442
gcggggctca cgcctgtaat cccagcactt tgggaggctg aggcgggcag atcacaaggt 60
caggagatcg agaccatcct ggctaacatg gtgaaacccc atctctacta aaaatacaaa 120
aaattagccg ggcgtggtgg cgggcccctg tagtcccagc tatttgggag gctgaggcag 180
gagaatggag tgaatccggg aggcagagct tgcagtgagc tgagatcgtg ccactgcatt 240
ccagcctagg cgacagagcc agactctgtc tcaaaaaaaa aaaaaaaaaa aaaaaatt 298

<210> 5443
<211> 44
<212> DNA
<213> Homo sapiens

<400> 5443
gcaaaactcc gtctcaaaaa aaaaaaaaaa aaaaaaaaaa aaga 44

<210> 5444
<211> 220
<212> DNA
<213> Homo sapiens

<400> 5444
taacacagtg aaaccccgtc tctactaaaa atacaaaaat tagccgggcc tggtggtggg 60
cgcctgtagt cccagctgct ggggaggctg aggcaggaga atggcgtgaa cccgggaggc 120
ggagcttgca gtgagccgag atggcgccac tgcactccag cctgggcgac agagcgagac 180
tccttctcaa aaaaaaaaaa aaaaaaaaaa aagagagaaa 220

<210> 5445
<211> 306
<212> DNA
<213> Homo sapiens

<400> 5445
ccttccggct gggcacagtg gcttacgcct gtaatcccag cactttggga ggccgaggca 60
ggcggatcac gaggtcagga gatcgagacc atcctggcta acacggtgaa accccgtctc 120
tactaaaaat acaaaaaatt agctgggcgt ggtggcaggc gcctgtagtc ccagctactc 180
aggaggctga ggcaggagaa tggcatgaat ccgggaggca gagcttgccg tgagctgaga 240
tcgtgccact gcactccagc ctgggcgaga gagcaagact ccgtctcaaa aaaaaaaaaa 300
aaagaa 306

<210> 5446
<211> 143
<212> DNA
<213> Homo sapiens

<400> 5446
gtagtcccag ctactgggga ggctgaggca ggagaatggc gtgaacctgg gaggcggagc 60
ttgcagtgag ccgagatcgc gccactgcac tccagcctgg gcgacagagc gagactccgt 120
ctcaaaaaaa aaaaaaagaa atg 143

<210> 5447

<211> 170
<212> DNA
<213> Homo sapiens

<400> 5447
gccgggcgtg gtagcgggcg cctgtagtcc cagctactcg ggaggctgag gcaggagaat 60
ggcgtgaacc cgggaggcgg agcttgcagt gagccgagat ctcgccactg cactccagcc 120
tgggcgacag agcgagactc cgtctcaaaa aaaaaaaaaa aaaaagactg 170

<210> 5448
<211> 271
<212> DNA
<213> Homo sapiens

<400> 5448
cactttggga ggctgaggcg ggcggatcac gaggtcagga aatcgagtcc atcctggcta 60
acatggtgaa accccgtctc tactaaaaat acaaaaaatt agccgggcgt gctggtgggc 120
gtctgtagtc ccagctactc aggaggctga ggcaggagaa tggcgtgaac ccgggaggcg 180
gaggttgcag tgagctgaga tcgcgccaca gcaactccag cctgggcgac agagcgagac 240
tctgtctcaa aaaaaaaaaa aaaaaagaaa a 271

<210> 5449
<211> 98
<212> DNA
<213> Homo sapiens

<400> 5449
cggagcttgc agtgagccga gatcgcgcca ctgcactcca gcctgggcga cagagcgaga 60
ctccgtctca aaaaaaaaaa aaagaaaacc aagttaga 98

<210> 5450
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5450
gcctgtaatc ccagcacttt gggaggctga ggcgggcgga tcacgaggtc aggagatcga 60
gatcattctg gctaacatgg tgaaaccccg tctctactaa aaatacaaaa aaaattagcc 120
gggcgtggta gcgggcgcct gtagtcccag ctactcggga ggctgaggca ggagaatggc 180
gtgaacccgg gaggcgcagc ttgcagtgag ccaagacagc gccactgcag cccagcctgg 240
gcgaaagagc aagactctgt ctcaaaaaaa aaaaaaaaaa aaaaaaagga aggaaa 296

<210> 5451
<211> 135
<212> DNA
<213> Homo sapiens

<400> 5451
agactgagca ggagaatggc gtgaacccgg gaggcggagc ttgcagtgag cagagattgt 60
gccactgcac tccagcctgg gtgacagagg gagattctgt ctcaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa gaatc 135

<210> 5452
<211> 171
<212> DNA
<213> Homo sapiens

<400> 5452
aaaaaattag ccgggtgtgg tggcgggcgc ctgtagtccc agctgctggg gaggctgagg 60
caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg agccgagatc ccgccactgc 120
actccagcct gggtgacaga gcgagactcc atctcaaaaa aaaaaaaaaa a 171

<210> 5453
<211> 184
<212> DNA
<213> Homo sapiens

<400> 5453
aaatacaaaa aattagccag gcgtggtggc gggtgcctgt agtcccagct actcgggagg 60
ctgaggcagg agaatggcat gaacctggga ggcggagctt gcagtgagct gagatcgtgc 120
cactgcactc cagcctgggc aacagagcaa gaccccgtct caaaaaaaaa aaaaaaaaaa 180
ggaa 184

<210> 5454
<211> 125
<212> DNA
<213> Homo sapiens

<400> 5454
ctgaggcagg agaatggcgt gaacccggga ggcggagctt gcagtgagcc gagatggcgc 60
cactgcagtc cagcctgggc gatagagcga gactctgtct caaaaaaaaa aaaaaaaaaa 120
aaatt 125

<210> 5455
<211> 196
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (106)
<223> n equals a,t,g, or c

<400> 5455
tctactaaaa atacaaaaaa ttagccgggc gtagtggcgg gcgcctgtag tcccagctac 60
ttgggaggct gaggcaggag aatggcgtga acccgggagg cggacntgca gtgagccgag 120
atcccgccac tgcactccag cctgggcgac agagcgagac tccgtctcaa aaaaaaaaaa 180
aaaaaaaaaa gaaata 196

<210> 5456
<211> 183
<212> DNA
<213> Homo sapiens

<400> 5456
aatacaaaaa attagccggg tgtggtggcg ggcgcctgta gtcccagcta ctcgggaggc 60
tgaggcagga gaatggcgtg aacccgggag gtggagcttg cagtgagctg agatcgtgcc 120
actgcactcc agcctgggcg acagagcgag actccgtctc aaaaaaaacc cacaaacaac 180
aaa 183

<210> 5457
<211> 105

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<212> DNA
<213> Homo sapiens

<400> 5457
ctggaacctg ggaggcagag tttgcagtga gccgagatca ggccactgca ctccagcctg 60
ggcaacagag caagactctg tctcaaaaaa aaaaaaaaaa aaaag 105

<210> 5458
<211> 319
<212> DNA
<213> Homo sapiens

<400> 5458
aagaatagaa atcaggccgg gcgcggtggc tcacgcctgt aatcccagca ctttgggagg 60
ccgaggccgg cggatcacaa ggtcaggaga tcgagaccat cctggctaac atggtgaaac 120
cccgtctgta ctaaacatac aaaaagttag ccgggcatgg tggcgggcac ctgccgtccc 180
agctacttgg gaggctgagg caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg 240
agccgagatg gcgccactgc actccagcct gggcgacaga gcgagactcc gtctcaaaaa 300
gaaaaagaat agaaatcta 319

<210> 5459
<211> 307
<212> DNA
<213> Homo sapiens

<400> 5459
gggccgggcg cggtggctca cgcctgtaat cccagcactt tgtgaggctg aagcgggctg 60
atcacgaggt caggagattg agaccatcct ggctaaaacg gggaaacccg gtctctacta 120
aaaatacaaa aaaattagcc gggcatggcg gcgggcacct gtagtcccag ctacttggga 180
ggctgagaca ggagaatggc atgaacccgg gaggcggagc ttgcagtgag cctaaatcgc 240
gccgctgtac tccagcttgg gcgacagagc gagactccgt ctcaaaaaaa aaaaaaaaaa 300
aaaaaaa 307

<210> 5460
<211> 311
<212> DNA
<213> Homo sapiens

<400> 5460
acattggtta ggccgggcgc ggtgcctcac acctgtaatc ccagcacttt gggaggccga 60
ggcgggcgga tcacgaggtc aggagatcga gaccatcctg gctaacacgg tgaaaccccg 120
tctctactaa aaatacaaaa aattagctgg gcatggtgac gggcgcttgt agccccagct 180
actcgggagg ctgaggcagg agaatggcgt gaacctggga ggcagagctt gcagtgagca 240
gagatcacgc cactgcactc cagcctgggc gacagagcga gactccatct caaaaaaaaa 300
gaagaaatac a 311

<210> 5461
<211> 300
<212> DNA
<213> Homo sapiens

<400> 5461
gcgcggtggc tcacgcctgt aatcccagca ctttgggagg ccgaggcggg tggatcacga 60
ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccgtctcca ctaaaaatac 120
aaaaaattct ccgggcatgg tggcgggcgc ctgtagtccc agctactcca gaggctgagg 180
caggagaatg gcatgagccc aggaggcgga gcatgcagcg agccgagatg gaaccactgc 240
actccagcct gggtgacaga gcgagactcc gtctcaaaaa aaaaaaaaaa aaaaccacac 300

<210> 5462
<211> 175
<212> DNA
<213> Homo sapiens

<400> 5462
cgggcgtagt ggcgggcgcc tgtagtccca gctacttggg aggctgaggc aggagaatgg 60
cgtgaacccg ggaggcggag cttgcagtga gccgagattg cgccactgca ctccagcctg 120
ggcgacagag cgagactccg tctcaaaaaa aaaaaaaaaa aaaaaaaaaa atcac 175

<210> 5463
<211> 196
<212> DNA
<213> Homo sapiens

<400> 5463
tctactgaaa atacagaaaa attagccggg cgtggtagcg ggcgcctgta gtcccagcta 60
ctcgggaggc tgaggcagga gaatggcgtg aacccgggag gcggagcttg cagtgagccg 120
agatcgcgcc actgcactcc agactgggcg acagagcgag actccgtctc aaaaaaaaaa 180
aaaaaaaaaa aatgac 196

<210> 5464
<211> 277
<212> DNA
<213> Homo sapiens

<400> 5464
tgtaatccca gcactttggg aggccgaggc gggcggatca cgaggtcagg agatccagac 60
cagcctggct aacatggtga aaccccgtct ctactaaaaa tacaaataat tagcctggcg 120
tggtggtggg cacctgtagt cccagctact ggggaggtga ggcaggagaa tggcgtgaac 180
ccgggaggcg gagcttgcag tgagccgaga tcgcaccact gcactccagt ctgggcgaca 240
gagcgagaca ccgtcaaaaa aaaaaaaaaa aaaaaga 277

<210> 5465
<211> 159
<212> DNA
<213> Homo sapiens

<400> 5465
ctgtggtccc agctactcgg gaggctgagg gaggagaatg gcgtgaaccc aggaggcaga 60
gcttgcagtg agccgagatc gcgccactgc actccagcct gggtgacaga gcgagactcc 120
gtctcaaaaa aaaaaaaaaa gaaaagaaaa agaaaaata 159

<210> 5466
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5466
gggtgcggtg gctcatgcct gtaatcccag cactttggga ggccaaggca ggcggatcac 60
gaggtcagga gatcaagacc atcctggcta acacggtgaa accccgtctc tactaaaaat 120
acaaaaaatt agctgggtgt ggtggtgggt gcctgtagtc ccagctactc gggaggctga 180
ggcaggagaa tggcatgaac ccgggaggca gagcttacag tgagcctaga ttgcgccact 240
gcactccagc ctgggcaaca gagcgagact ccatctcaaa aaaaaaaaaa aaaagg 296

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<210> 5467
<211> 219
<212> DNA
<213> Homo sapiens

<400> 5467
catcctggct aacacagtga aaccccgtct ctactaaaaa tacaaaaaat tagctgggcg 60
tgctggtggg tgcctgtagt cccagctact cgggaggctg aggcaggaga atggcgtgaa 120
cccaggaggc ggagcttgca gagagccgag atctcgccac tgcactccag cctgggcgac 180
agagcgagac tccgtctcaa aaaaaaaaga aaaaagaaa 219

<210> 5468
<211> 301
<212> DNA
<213> Homo sapiens

<400> 5468
gccgggcgcg gtggctcaag cctgtaatcc cagcactttg ggaggccgag acgggcggat 60
cacgaggtca ggagatcgag accatcctgg ctaacacggt gaaaccccgt ctctactaaa 120
aatacaaaaa ttagccgggc atggtggcgc gcgcctgtag tcccagctac acgggaggct 180
gaggcaggag aatggcgtga acccgggagg cggagcttgc agtgagtcga gatcgcgcca 240
ctgcactcca gcctgggtga cagagtgaaa ctccgtctca aaaaaaaaaa aaaaagagaa 300
t 301

<210> 5469
<211> 154
<212> DNA
<213> Homo sapiens

<400> 5469
tggtagtccc agctactcgg taggctgagg caggagaatg gcttgaaccc ggtaggcgga 60
gcttgcagtg agccgagatc acgccactgc actccagcct gggccacaga gcgagactcc 120
gtctcaaaaa aaaaaaaaaa aaagaaagaa attg 154

<210> 5470
<211> 2548
<212> DNA
<213> Homo sapiens

<400> 5470
agcttgcaaa tggccgggcg cggtggctca cccctgtaat cccagcactt tgggaggcca 60
aggcgggcgg atcacgaggt caggagatcg agaccatcct ggctaacacg gtgaaacccc 120
gtctctacta aaaatacaaa aaattagctg gccatagtgg cgggtgcctg tagtcccagc 180
tactcgggag gctgaggcag gagaatggcg tgaacccggg aggcggagct tgcagtgagc 240
cgagactgtg cccctgcact ccagcctggg cgacagagag agactccgtc tcaaaaaaaa 300
aaaaagcttg caaacgcaga aaagaatgaa aaacaatgaa gatggtaaat atgtttataa 360
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actgcactcc agcctgggcg acagagtgag actccgtctc aaaaaagaa 169

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<211> 176
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<400> 5473
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<211> 288
<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
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aaaaaaaaaa aaaaaaaaaa aaaaaga 207

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaagaaca aa 162

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<212> DNA
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<400> 5485

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<212> DNA
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<220>
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<223> n equals a,t,g, or c

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g 301

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 307
<212> DNA
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<212> DNA
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<210> 5511
<211> 63
<212> DNA
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<210> 5512
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<211> 153
<212> DNA
<213> Homo sapiens

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aaaaaaaaaa aaaaaaaaga aagcagtggg gcc 153

<210> 5515
<211> 269
<212> DNA
<213> Homo sapiens

<400> 5515
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<210> 5516
<211> 202
<212> DNA
<213> Homo sapiens

<400> 5516
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aaaaaaaaaa aaaaaaaaga aa 202

<210> 5517
<211> 203
<212> DNA
<213> Homo sapiens

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gccgagatct cgccactgca ctccagcctg ggcgacagag cgagactccg tctcaaaaaa 180
aaaaaaaaag aaagacatgt aaa 203

<210> 5518
<211> 121
<212> DNA
<213> Homo sapiens

<400> 5518
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agcactgcac tccagcctgg gcaacagagc gagactccat ctcaaaaaaa aaaaaaaaaa 120
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<210> 5519
<211> 166
<212> DNA
<213> Homo sapiens

<400> 5519
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gggcaacaga gtgagactcc gtctcaaaaa aaaaaaaaaa aagata 166

<210> 5520
<211> 295
<212> DNA
<213> Homo sapiens

<400> 5520
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<210> 5521
<211> 310
<212> DNA
<213> Homo sapiens

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gaaaagaaaa 310

<210> 5522
<211> 280
<212> DNA
<213> Homo sapiens

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aataaaaaaa aaaaaaaaaa aaaaaaaaag aaaagaaaaa 280

<210> 5523
<211> 190
<212> DNA
<213> Homo sapiens

<400> 5523
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aaaaaagaaa 190

<210> 5524
<211> 278
<212> DNA
<213> Homo sapiens

<400> 5524
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<210> 5525
<211> 2364
<212> DNA
<213> Homo sapiens

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<210> 5526
<211> 304
<212> DNA
<213> Homo sapiens

<400> 5526
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cggatcatga ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccgtctcca 120
ctaaaaatac aaaaaattag ccgggcacgg tggcgggcgt ctgtagtccc agctactagg 180

gaggctgagg caggagaatg gtgtgaaccc aggaggcgga gcttgcagtg agccaagatc 240
gcgccactgc agtccagcct gggcgaaaga gcagactccg tctcaaaaaa aaaaaaaaaa 300
aaaa 304

<210> 5527
<211> 261
<212> DNA
<213> Homo sapiens

<400> 5527
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taaaaataca aaaaattagc cgggcgtggt agcgggcgcc tgtagtccca gctactcggg 120
aggctgaggc aggagaatgg cgtgaacccg ggaggcggag cttgcagtga gccgagatcg 180
cgccactgca ctccagcctg ggcgacagag cgagactccg tctcaaaaaa aaaaaaaaaa 240
aaaaaagaaa aagggataaa a 261

<210> 5528
<211> 297
<212> DNA
<213> Homo sapiens

<400> 5528
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agatcgagac cttcctggct aacacggtga aaccccgtct ctactaaaaa tacaaaaaat 120
tagccgggcc tagtggcggg cgcctgtagt cccagctact cgggaggctg aggcaggaga 180
atggcatgaa cccgggaggc ggagcttgca gtgagcccag atcgtgccac tgcactccag 240
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<210> 5529
<211> 108
<212> DNA
<213> Homo sapiens

<400> 5529
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cactgcactc cagcctgggc gacagagcga gactccatct caaaaaaa 108

<210> 5530
<211> 312
<212> DNA
<213> Homo sapiens

<400> 5530
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tcccgccact gcactccagc ctgggggaca gagcgagact ccgtctcaaa aaaaaaaaaa 300
aaaaagactg tc 312

<210> 5531
<211> 158
<212> DNA
<213> Homo sapiens

<400> 5531

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gagcttgcag tgagcagaga tcgcgccact gcactccagc ctgggcaaca gagcgagact 120
ctgtctcaga aaaaaaaaga aaaaagaaaa aagaaaat 158

<210> 5532
<211> 298
<212> DNA
<213> Homo sapiens

<400> 5532
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ggatcacgag gtcaggagat cgagaccatc ctggctaaca cggtgaaacc ccgtctctac 120
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aggctgaggc aggagaatgg cgtgaacccg ggaggcggag cttgcagcga gcggaaatcg 240
caccactaca ctccaggctg ggggacagaa cgagacccca tctcaaaaaa aaaaagaa 298

<210> 5533
<211> 237
<212> DNA
<213> Homo sapiens

<400> 5533
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gcaggagaat ggcgtgaatc caggtggagc ttgcagtgag ctgagatcgc gccactgcac 180
tccagcctgg gtgacagagt gagactccat ctcaaaaaaa aaaaaaaaaa aaaaaga 237

<210> 5534
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5534
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catgaggtca ggagatcgag accatcctgg ctaatacggt gaaaccccgt ctctactaaa 120
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tgcactccag cctgggtgac agagcaagac tccatctcaa aaaaaaaaaa aaagaa 296

<210> 5535
<211> 311
<212> DNA
<213> Homo sapiens

<400> 5535
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gggcggatca cgaggtcagg agatcgagac catcctggct aacatggtga aaccctgtct 120
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agatcgtgcc actgcacttg agcctgggcg acagagcaag actccatctc aaaaaaaaaa 300
aaaaaaaaaa a 311

<210> 5536
<211> 294
<212> DNA
<213> Homo sapiens

<400> 5536
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<210> 5537
<211> 303
<212> DNA
<213> Homo sapiens

<400> 5537
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<210> 5538
<211> 191
<212> DNA
<213> Homo sapiens

<400> 5538
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<210> 5539
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<212> DNA
<213> Homo sapiens

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tcctaatcaa aaa 193

<210> 5540
<211> 195
<212> DNA
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<400> 5540
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taattctaac aaaca 195

<210> 5541
<211> 281

<212> DNA
<213> Homo sapiens

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ccgtctcaaa aaaaaaaaaa agaaaaagaa aaaggacaac a 281

<210> 5542
<211> 301
<212> DNA
<213> Homo sapiens

<400> 5542
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<210> 5543
<211> 310
<212> DNA
<213> Homo sapiens

<400> 5543
agccgggcgc ggtggctcac gcctgcaatc ccagcacttt gggaggccaa ggcgggcaga 60
tcacaaggtc aggagatcga gaccatcctg gctaacacgg tgaaaccccg tctctactaa 120
aaatacaaaa acaaaactag ccgggcttgg tggtgggcgc ctgtagtccc agctactcaa 180
gaggctgagg caggagaatg gcgtgaactc gggaggcgga gcttgcaatg agccgagatc 240
gcgccactgc actccagcct gggcgacaga gcgagactcc gtctcaaaaa aaaaaaaaaa 300
aaaaaaaaaa 310

<210> 5544
<211> 297
<212> DNA
<213> Homo sapiens

<400> 5544
gtgcggtggc tcacgcctgt aatcccagca ctttgggagg ccaagccggg cggatcatga 60
ggtcaggaga tcgagaccat cctggctaac acggtgaaac cctgtctcta ctaaaaatac 120
aaaaaattag ccgggcgtgg tggcgggtgc ctgtagtccc agctactcgg gaggccgagg 180
caggagaatg gtgtgaaccc gggaggtgga gcttgcagtg agccgagatc gggccactgc 240
actccagcct gggcgacaga gcaagactct gtctcaaaaa aaaaaaagaa atggaaa 297

<210> 5545
<211> 182
<212> DNA
<213> Homo sapiens

<400> 5545
tactaaaaat acaaaaagtt agccgggcga agtggcgggc gcctgtagtc ccagctactc 60
gggaggctga ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaaa 120
tcgcgccact gcactccagc ctgggtgaca gagcgagact ccgtctcaaa aaaaaaaaaa 180

aa 182

<210> 5546
<211> 303
<212> DNA
<213> Homo sapiens

<400> 5546
ataggctggg cgcggtggct cacgcctgta atcccagcac tttgggaggc cgaggcaggc 60
ggatcatgag gtcaggagat cgagaccatc ctggctaaca cggtgaaacc cagtctctac 120
taaaaataca aaaaattagc tgggtgtgct ggcaggcatc tgtagtccca actactcggg 180
aggctgaggc gggagaatgg catgaacctg ggaggcggag cttgcagtga gccgagatca 240
cgccactgca ctccagcctg ggcgacagag tgagactacc tctccaaaaa aaaaaaaaaa 300
aaa 303

<210> 5547
<211> 297
<212> DNA
<213> Homo sapiens

<400> 5547
gggcgcggtg gctcacgtct gtaatcccag cactttggga ggccgagggg ggcggatcac 60
gatgtcagga gatcgagacc atcctggcta acatggtgaa accctgtctc tgctaaaaat 120
acaaaaaatt agcagggcgt ggtggcgggc gcgtgtagtc ccagctactc aggaggctga 180
ggcaggagaa tggagtgaac ccaggaggcg gacgtgcagt gagccgagat cgcgccactg 240
cactccagcc tgggcgacag agcaagactc cgtctcaaaa aaaaaaaaaa aaaaaaa 297

<210> 5548
<211> 323
<212> DNA
<213> Homo sapiens

<400> 5548
aaaaaactat ttttcggccg gggggggtgg atcacgcctg taatcccagc actttgggag 60
gccgaggcgg gcagatcacg aggtcaggag atcgagacca tcctggctaa cacggtgaaa 120
ccccgtctct actaaaaaaa caaaaaatta gccgggcgtg gtagcgggag cctgtagtcc 180
cagctactcg ggaggctgag gcaggagaat ggcgtgaacc cgggaggcgg agcttgcagt 240
gagccgagat cgcgccactg cactccagcc tgggcgacag agcgagactc cgtctcaaaa 300
aaaaaaaaaa aaaaaaacaa aaa 323

<210> 5549
<211> 277
<212> DNA
<213> Homo sapiens

<400> 5549
ataagtcact ttgggaggcc gagacgggcg gatcacgagg tcaggagatg gagaccatcc 60
tggctaacac ggtgaaaccc cgtctctact aaaaatacaa aaaaattagc cgggcgtagt 120
ggcgggcacc tgtagtccca gctactccgg aggctgaggc aaggagaatg gcgtgaacct 180
gggaggcgga gcttgcagtg agccgagatg gcgccactgc actccagcct gggtgatgga 240
gcgagacttg tctcaaaaaa aaaaaaaaaa agaataa 277

<210> 5550
<211> 303
<212> DNA
<213> Homo sapiens

<400> 5550
gccgggcgtg gtggctcacg cctgtaatcc cagcactttg ggaggctgag gcaggcggat 60
cacaaggtca ggagatcgag accatcctgg ctaacacggt gaaaccccctc tctactaaaa 120
atacaaagaa ttagccgggt gtggtggcgc acgcctgtag tcccagctac tcgggaggct 180
gaggcaggag aatggcggga acccgggagg cagagcttgc agtgagccaa gatcgtgcca 240
ctgcactcca gcctgggtga cagagcgaga ctccacctca aaaaaaaaaa aaaaaaaaaa 300
gaa 303

<210> 5551
<211> 309
<212> DNA
<213> Homo sapiens

<400> 5551
cctgtaatcc cagcactttg ggaggccgag gcgggcggat cacaaggtca ggagatcgag 60
accatcccgg ctaaaacggt gaaaccccgt ctctactaaa aatacaaaaa attagccggg 120
cgtagtggcg ggcgcctgta gtcccagcta cttgggaggc tgaggcagga gaatggcgtg 180
aacccgggag gctgagcttg cagtgagccg agatcccgcc actgcactcc agcctgggcg 240
acagagcgag actccgtctc aaaaaataaa aataaaaata aaaaataata ataaaaataa 300
aaaataaaa 309

<210> 5552
<211> 310
<212> DNA
<213> Homo sapiens

<400> 5552
ggacgggcgc ggtggctcac gcctgtaatc ccagcacttt gggaggccga ggcgggcgga 60
tcacgaggtc aggagatcga gaccatcccg gctaaaacgg tgaaaccccg tctctactaa 120
aaatacaaaa aattagccgg gcgtagtggc gggcgcctgt agtcccagct acttgggagg 180
ctgaggcagg agaatggcgt gaacccggga ggcggaggtt gcagtgagcc gagatcccgc 240
cactgcactc cagcctgggc gacagagcga gactccgtct caaaaaaaaa aaaaaaaaaa 300
aaaaaaaaat 310

<210> 5553
<211> 247
<212> DNA
<213> Homo sapiens

<400> 5553
aggccgaggc gggcggatca cgaggtcagg agatcgagac caacctggct aacacagtga 60
aaccccgtct ctaccaaaat acaaaaaatt agccgggggt agtggcgggc gccttgtagt 120
cccagctact tgggaagctg aggcaggaga atggcatgaa ccagggaggc ggagcttgca 180
gtgagccgag atcgcaccac tgcactccag cctgggcgac acagcaagac tccgtctcaa 240
aaaaaaa 247

<210> 5554
<211> 175
<212> DNA
<213> Homo sapiens

<400> 5554
ccaaaaatta gccgggcgtg gtggcgggcg cctgtagtcc cagctactcg ggaggctgag 60
gcaggagaat ggcgtgaacc cgggaggcgg agcttgcagt gagctgagat cgcgccattg 120
cactccagcc tgggcgacag agccagactc agtctccaaa aaaaagaaga aaaga 175

<210> 5555
<211> 311
<212> DNA
<213> Homo sapiens

<400> 5555
actgtcttag gccaggcgtg gtggctcacg cctataatcc cagcactttg ggaggccaag 60
gtgggcggat cacgaggtca ggagatcgag accatcctgg ctaacacggt gaaaccccgt 120
ctctgctaaa aatacaaaaa attagccggg catggtggcg ggcgcctgta gtcccagcta 180
ctcgggaggc tgaggcagga gaatggcgtg aacccaggag gcgcagcttt cagtgagccg 240
agatcgcgcc actgcactcc agcctgggcg acagagctaa actccgtctc aaaaaaacaaa 300
acaaaacaaa a 311

<210> 5556
<211> 183
<212> DNA
<213> Homo sapiens

<400> 5556
gaaaaattta gccgggcgtg gtggcgggcg catgtagtcc cggctactcg ggaggctgag 60
gcaggagaat ggcgtgaacc cgggaggcgg agcttgcagt gagccgagat ggcgccactg 120
cactccagcc tgggcgacag agcgagactc cgtctcaaaa aaaaaaaaaa aaataataat 180
gaa 183

<210> 5557
<211> 292
<212> DNA
<213> Homo sapiens

<400> 5557
tggctcaagc ctgtaatccc agcactttgg gaggtcgagg cgggcggatc acgaggtcag 60
gagatcgaga ccatcctggc taacacggtg aaaccttgtc tctactaaaa atacaaaaat 120
tagccgggca tagtggcggg cgcctgtagt cctagctact cgggaggctg aggcaggaga 180
atggcgtgaa cccgggaggt ggagcttgca gtgagctgag attgcgccac tgcactccag 240
cctgggtgac agagtgagac tccgtctcaa aaaaaaaaaa aaaattaaaa aa 292

<210> 5558
<211> 93
<212> DNA
<213> Homo sapiens

<400> 5558
gagctggcag tgagccgaga tcccgccact gcactccagc ctgggcgaca gagcgagact 60
ccgtctcaaa aaaaaaaaaa aaaaaaaaga aaa 93

<210> 5559
<211> 287
<212> DNA
<213> Homo sapiens

<400> 5559
ttgtaatccc agcactttgg gaggccgagg cgggcggatc acaaggtcag gagatcgaaa 60
ccatcctggc tgacacggtg aaaccccgtc tctactaaaa atacaaaaaa atggccgggt 120
gtggtggcga gcacctgcct gtagtcccag ctactcggga ggctgaggca ggagaatggc 180
ttgaacccgg gaggcggagc ttgcagtgag ccgagatcgc gccactgcac tccagcctag 240
gcgacagagc aagactccct ctccaaaaaa aaaaaaaaaa aaaaaaa 287

<210> 5560
<211> 136
<212> DNA
<213> Homo sapiens

<400> 5560
ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga ttgtgccact 60
gcactccagc ctgggcgaca gagtgagact ccgtctcaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaa 136

<210> 5561
<211> 273
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> n equals a,t,g, or c

<400> 5561
tcttttggga ggccgagncg ggcggatcac gaggtcagga gatcgagacc atcctggcaa 60
acacggtgaa accccgtctc tactaaaaat acaaaaaaat tagccgggcg tggtggcggg 120
cgcctgtagt cccagctact cgggaggctg aggcaggaga atggcgtgag cccgggaggc 180
ggagcttgca gtgagcggag atcgcgccac cgcacttcag cctgggcgac agagcaagac 240
tcttgtctca aaaaaaaaaa aaaaaagtgg cag 273

<210> 5562
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5562
cgggcgcggt ggctcacgcc tgtaatccca gcacttgggg aggccgaggc gggcggatca 60
cgatgtcagg agatcgatac catcctggct aacacggtga agccccatct ctactaaaaa 120
tacaaaaaat tatccgggcg tggtggcggc cgcctgtagt cccagctact cgtgaggctg 180
aggcaggaga atggcatgaa cccgggaggc ggagcttgcc gtgagccgag attgcgccac 240
tgcactccag cctgggcgac agagccagac tccgtctcaa aaacaaacaa acaaaa 296

<210> 5563
<211> 308
<212> DNA
<213> Homo sapiens

<400> 5563
agggccgggc gcggtggctc atgcctgtaa tcccagcact ttgggaggcc gaggcgggcg 60
gatcacgagg tcaggagatc gagaccatcc tggctaacgt ggtgaaaccc cgtctctact 120
aaaagtacaa ataaaaaatt agccgggcgt ggcggtgggc gcctgtagtc ccagctactc 180
gggaggctga ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga 240
ttgcgccact gcactccagc ctgggcgaca cagcaagact ccgtctcaaa aaaaaaagtt 300
gaaaagct 308

<210> 5564
<211> 138
<212> DNA

<213> Homo sapiens

<400> 5564
cgggaggctg aagcaggaga atggcgtgaa cccaggaagc ggagcttgca gtgagccgag 60
attgcgccac tgcactccag cctgggtgac agagccagac tcggtctcaa aaaaaaaaaa 120
aaaaaaaaaa aaaagaaa 138

<210> 5565
<211> 243
<212> DNA
<213> Homo sapiens

<400> 5565
tcacgaggtc aggagatcga gaccatcctg gctaacacgg tgaaaccccg tctctactaa 60
aaatccaaaa aattagccgg gcgtggtggt gggcgcctgt agtcccagct actcgggagg 120
ctaaggcaga agaatggcag gaacctggga ggcggagctt gcagtgagcc gagatcacgc 180
cactgcactc cagcctgggc gacagagcga gactccgtct caaaaaaaaa aaaaaaaaaa 240
att 243

<210> 5566
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5566
gcgcggtggc tcaagcctgt aatcccagca ctttgggaaa ccgaggcggg tggatcacaa 60
ggtcaggaga tcgagaccat cctggctaac acggtgaaac cccatctcta ctaaaaaata 120
caaaaaaact tagccgggtg tggtggcggg cgcctgtagt cccagctact caggaggctg 180
aagcaggaga atggcgtgaa cccgggaggc ggagcttgca gtgagccgag atcgcgccac 240
tgcactccag cctgggggac agagcgagac tccatctcaa aaaaaaaaaa aaaaaa 296

<210> 5567
<211> 202
<212> DNA
<213> Homo sapiens

<400> 5567
ctactaaaaa tacaaaaaat tagccgggcg tggtagcggg cgcctgtagt cccagctact 60
cgggaggctg aggcaggaga atggcgtgaa cccgggaggc ggagcttgca gtgagccgag 120
atcgcgccac tgcactccag cctgagtgac agagcgagac tccgtctcaa aaaaaaaaaa 180
aaaaaaaaag gttaatatgt aa 202

<210> 5568
<211> 248
<212> DNA
<213> Homo sapiens

<400> 5568
gaggtggatg gatcatgagg tcaggagatc gagaccatcc tggctaacac agtgaaaccc 60
cgtctctact aaaaatacaa aaaattagcc aggcgtgatg gcgggcgcct gtagtcccag 120
ctactcggga ggctgaggca ggagaatggc gggaacctgg gaggcggagc ttgcagtgag 180
ccaagatcgc gccactgcac cccagcctgg gtgacagagc gagactccgt ctcaaaaaaa 240
aaaaagaa 248

<210> 5569
<211> 192

<212> DNA
<213> Homo sapiens

<400> 5569
aatacaaaaa attagccggg cgtagtggcg ggcgcctgta gtcccagcta cttgggaggc 60
tgaggcagga gaatggcgtg aacccgggag gcagagcttg cagtgagccg agatcccgcc 120
actgcactcc agcctgggcg acagagcgag actccgtctc aaaaaaaaaa aaaaaaaaag 180
aagtagacaa aa 192

<210> 5570
<211> 320
<212> DNA
<213> Homo sapiens

<400> 5570
atggtggctc acgcctgtaa tcccagcact ttgggaggcc gaggcgggcg gatcacgagg 60
tcaggagatt gagaccatcc tggctaacac ggtgaaaccc cgtctctact aaaaatacaa 120
aaaaattagc cgggcgtggt ggcgggcacc tgtagtccca gctactcagg aggctgagac 180
aggagaatgg cgtgaacccg ggaggcagag cttgcagtga gccgagattg caccactgca 240
ctccagcctg ggcaacagag caagactccg tctcaaaaaa aaaaaagaaa aaagaaaaga 300
aaagaaaaga aaacgaagtc 320

<210> 5571
<211> 274
<212> DNA
<213> Homo sapiens

<400> 5571
atgcctgtaa tcccacactt tgggaggccg aggcaggcgg atcacgaggt caggagatcg 60
agaccatcct ggctaacacg gtgaaaccct ttctctacta aaaatacaaa aaattagccg 120
ggcgtggtgg cggtcgcccg tagtcccagc tactcgggag gctgaggcag aagaatggcg 180
tgaacctggg aggcagagct tgcagtgagc cgagatcggt ccactgcatt ccagcctggg 240
tgacagagcg agactccgtc tcaaacaaaa aaaa 274

<210> 5572
<211> 308
<212> DNA
<213> Homo sapiens

<400> 5572
caggccgggc gcggtggctc acgcctgtaa tcccagcact ttgggaggcc gaggcgggcg 60
gatcacgagg tcaggagatc gagaccatcc tggctaacac ggtgaaaccc cgtctctact 120
aaaaatacaa aaaattagcc gggcgtggtg gtgggcgcct gtaatcccag ctactcggga 180
ggctgaggca ggagaatggc atgaacccaa gaggcggagc ttgcagtgag ccgggatagc 240
gccactgcag tccagcttgg gcgaaagagt gagactccgt ctcaaaaaaa aaaaaaagtt 300
gaataaac 308

<210> 5573
<211> 153
<212> DNA
<213> Homo sapiens

<400> 5573
gggcgtggtg gcgggcgcct gtagtcccag ctactcggga ggctgaggca ggagaatggc 60
gtgaacccgg gaggcggagc ttgcagtgag ctgagatcac cccactgcac tccagcctgg 120
gcgacagagt gagactctgt ctcaaaaaaa aaa 153

<210> 5574
<211> 300
<212> DNA
<213> Homo sapiens

<400> 5574
gctcacgcct gtaatcccag cactttggga ggccgaggcg ggcggatcac gaggtcagga 60
gatcgagacc atcctggcta acacggtgaa accccatctc tactaaaaat acaaaaaatt 120
agccgggcgt ggtagcgggc gcctgtagtc ccagctactc gggaggctga ggcaggagaa 180
tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga tcgcgccact gcactccagc 240
ctgggcgaca gagcgagact ccgtctcaaa aaaaaaaaaa aaaaaaaaaa aaaaaattaa 300

<210> 5575
<211> 308
<212> DNA
<213> Homo sapiens

<400> 5575
ggtctgccag gcgcagtggc tcacgactgt aatcccagca ctttgggagg ccgaggcggg 60
cggatcacga ggtcaggaga tcgagaccat cctggctaac acggtgaaac ccggtctcta 120
ctaaaaatac aaaaagttag ccgggcgtgg tggcgggcgc ctgtagtccc atctactcgg 180
gaggctgagg caggagaatg gcgtgaaccc gggaagtgga gcttgcagta agccgagatc 240
gtgccactgc actccagtct gggcgacaga gcgagactcc gtctcagaaa ataaacaaac 300
aaaaaatc 308

<210> 5576
<211> 150
<212> DNA
<213> Homo sapiens

<400> 5576
ggcgcctgta gtcccagcta ctcgggaggc tgaggcagga gaatggcgtg aacccgggag 60
gcggagcttg cagtgagctg agatcgcgcc actgcactcc agcctgggcg acagagcgag 120
actctgtctc aaaaaaaaaa aagaattggc 150

<210> 5577
<211> 279
<212> DNA
<213> Homo sapiens

<400> 5577
aatcccagca ctttgggagg ccgaggcggg cagatcacga ggtcaggaga tcgagaccat 60
cctggctaac acggtgaaac cctgtctcta tgaaaaatac aaaaaattag ccgggcgtgg 120
tggcgggcgc ctgtagtccc agctacttgg gaggctgagg caggagaatg gtgtgaaccc 180
aggaggcaga gcttgcagtg agcggagatc gggccactgc agtccagcct gggcaacaga 240
gcaagactcc gtctcaaata aaaaacaaaa caaaacaaa 279

<210> 5578
<211> 198
<212> DNA
<213> Homo sapiens

<400> 5578
aaccccgtct ctactaaaaa tacaaaaaaa ttagctgggc gtggtggtgg gcgcctgtag 60
tcccagctac tcgggaggct gaggcaggag aatggcgtga acccaggagg cggcttgcag 120
tgagccgaga tcgcgccact gcactccagc ctgggtgaca gagcgagact ctgtctcaaa 180

aaaaaaaaaa aagcaatt 198

<210> 5579
<211> 287
<212> DNA
<213> Homo sapiens

<400> 5579
acgcctgtaa tcccagcact ttgggaggcc gaggtgggcg gatcacgagg tcaggagatc 60
aagaccatcc tggctaacac ggtgaaaccc cgtctctact aaaaatacaa aaaattagcc 120
gggcgtggta gcgggcgcct gtaatcgggg gtactccgga ggctgaggca ggagaatggc 180
gtgaacccgg gaggcggagc ttgcagtgag ccgagattgc gccactgcac tccagcctgg 240
gcgacagagc gagacttcat ctcaaaaaaa aaaaaaaaaa aaaaaaa 287

<210> 5580
<211> 135
<212> DNA
<213> Homo sapiens

<400> 5580
ctactcagga ggctgaggca ggagagtggc gtgaacccgg gaggcagagc ttgcagtgag 60
ccgagatcgc gccactgcac tccagcctgg atgacagagc aagactccgt ctcaaaaaaa 120
aaagaaaaaa agaca 135

<210> 5581
<211> 266
<212> DNA
<213> Homo sapiens

<400> 5581
atttgggagg ccgaggcggg cggatcacaa ggtcaggaga tcgagaccat cctggctaac 60
acggtgaaac cccgtctcta ctaaaaatac aaaaaaatta cccgggcgtg gtggtgggcg 120
cctgtggtcc cagctactcg ggaggctgag gcaggagaat ggtgtgaacc cgggaggcgg 180
agcttgcagt gagccgagat cgcaccactg cactccagcc tgggcgacag agcgagactc 240
catctcaaaa aaaaagaaat aagaaa 266

<210> 5582
<211> 322
<212> DNA
<213> Homo sapiens

<400> 5582
cggccgggcg cggtggctga cgcctgtaat cccagcactt tgggaggccg aggcgggcgg 60
atcacgaggt caggagatcg agaccatcct ggctaacacg gtgaaacccc gtctctacta 120
aaaatacaaa aaattagccg ggcgtggtag cgggcgcctg tagtcccagc tactcgggag 180
gctgaggcag gagaatggcg tgaacccggg aggcggagct ttcagtgagc cgagatcgcg 240
ccactgcact ccagcctggg cgacagagcg agactccgtc tcaaaaaaaa aaaaaaaaaa 300
aaaaaaaaaa aaaaaaaaat tc 322

<210> 5583
<211> 250
<212> DNA
<213> Homo sapiens

<400> 5583
gggcggatca cgaggtcagg agatcgagac catcctggct aacacggtga aaaccctgtc 60

tctactaaaa atacaaaaaa ttagccaggc ttggtggcgg gcgcctgtag tcccagctac 120
tcgggaggct gaggcaggag aatggcgtga acccgggagg cggagcttgc agtgagctga 180
gatcgcacta ctgcactcca gcctgggcga cagagcgtga ctccgtctca aaaaaaagca 240
attagaaact 250

<210> 5584
<211> 142
<212> DNA
<213> Homo sapiens

<400> 5584
cccagctact caggaggctg aggcaggaga atggcgtgaa cccgggaggc ggagcttgca 60
gtgagccgag atcccgccac tgcactccag cctgggcgac agagcgagac tccgtctcaa 120
aaaaaaaaaa aaaaaaaatg ga 142

<210> 5585
<211> 40
<212> DNA
<213> Homo sapiens

<400> 5585
tgagactccg tctcaaaaaa aaaaaaaaaa agtgaaaagg 40

<210> 5586
<211> 181
<212> DNA
<213> Homo sapiens

<400> 5586
caaaagttag ccgggcgtag tggcgggcgc ctgtggtccc agctactcgg gaggctgagg 60
caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg agccgagatc gcgccactgc 120
actccagcct gggtgacaga gcgagactcc gtctcaaaaa aaaaaaaaaa aaaaaaagat 180
t 181

<210> 5587
<211> 281
<212> DNA
<213> Homo sapiens

<400> 5587
tcccagcact ttgggaggcc taggcgggcg gatcacgagg tcaggagatg gagaccatcc 60
tggctaacac ggtgaaaccc cgtctctact aaaaatacaa aaaaaaatta gccgggcgtg 120
atggcgggcg cctgtagtcc cagctactca ggaggctaag gcaggagaat ggcatgaacc 180
caggaggcag agcttgcagt gagccaagat ggcgccactg cactccagcc tgggcgacag 240
agcgagactc cgtctcaaaa aaaaaaagac aacaacaaca a 281

<210> 5588
<211> 122
<212> DNA
<213> Homo sapiens

<400> 5588
cgggaggctg aggcaggaga atggcgtgaa cccaggaggc ggagcttgca gtgagccgag 60
atcgcgccac tgctctccag cctgggcgac agagcaagac tctgtctcaa aaaaaaaaaa 120
ga 122

<210> 5589
<211> 123
<212> DNA
<213> Homo sapiens

<400> 5589
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tta 123

<210> 5590
<211> 176
<212> DNA
<213> Homo sapiens

<400> 5590
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ggagaatggc atgaacccag gaggcggagc ttgcagtgag tggagatcgc gccactgcac 120
tccagcctgg gcgacagagc gagactccgt ctcaaaaaaa aaaaaaaaaa aaaatc 176

<210> 5591
<211> 270
<212> DNA
<213> Homo sapiens

<400> 5591
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gtgaaacccc gtctctacta aaaatacaaa aaattagccg ggcgtggtgg cgggcgcctg 120
tagtcccagc tactcgggag actgaggcag gagaatggcg tgaacccggg aggcggagct 180
tgcagtgagc cgagatcgcg cccctgcact ccagcctggg cgacagagcg agactccgcc 240
tcgaaaaaac aaaaacaaaa acacaaagtc 270

<210> 5592
<211> 301
<212> DNA
<213> Homo sapiens

<400> 5592
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tcacgaggtc aggagatcga gaccatcctg gctaacacgg tgaaaccccg tctctactaa 120
aaatacaaaa aaaattagcc gggcgtgttg gcgggtgcct gtagtcccag ctactcggga 180
ggctgaggca ggagaatggc atgaacccag gaggcggagc ttgcagtgag ccgagattgt 240
gccactgcac tccagcctgg gcaacagagc aagactctgt ctcaaaaaaa aaaaaaaaag 300
a 301

<210> 5593
<211> 237
<212> DNA
<213> Homo sapiens

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tggtggcggg cgcctgtagt cccagccact cgggaggctg aggcaggaga atggcgtgga 120
cccgggaggc ggagcttgca gtgagcggag atcgcgccac tgcactccag cctgggcgac 180
tgagcaggac tccgtctcaa aaaaaaaaaa aagaaaagaa aaaaagaaag aaagaaa 237

<210> 5594
<211> 301
<212> DNA
<213> Homo sapiens

<400> 5594
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aaaaattagc tgggcgtcgt ggcgggcgcc tgtggtccca gttactctgg aggctgaggc 180
acgagaatgg cgtgaaccca ggaggcggag cttgcagcga gctgagatcg caccactcca 240
ctccagcctg ggcaacagag cgagactctg tctcaaaaaa aaaaaaaaaa aaaaaaaaat 300
c 301

<210> 5595
<211> 88
<212> DNA
<213> Homo sapiens

<400> 5595
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aatccatctc aaaaaaaaaa aaaaaaag 88

<210> 5596
<211> 278
<212> DNA
<213> Homo sapiens

<400> 5596
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accatcctgg ctaacatgga gaaaccctgt ctctactaaa aatacaaaaa attagccggg 120
cgtagtggcg ggcgcctgta gtcccagcaa ctcgggaggt tgaggcagga gaatggtgtg 180
aacctgggag gtggagcttg tagtgagccg agatcgcgcc actgcactct agcctgggca 240
acacagcgag actccgtctc aaaaaaaaaa aaaaaaga 278

<210> 5597
<211> 214
<212> DNA
<213> Homo sapiens

<400> 5597
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cggctactcg ggaggctgag gcaggagaat ggcgtgaacc cgggaggcgg agcttgcagt 120
gagccgaggt cgcgccactg cactccagcc tgggcgacag agcgagactc cgtctcaaaa 180
aaaaaaaaaa aaaaaaaaaa aagattacac aata 214

<210> 5598
<211> 299
<212> DNA
<213> Homo sapiens

<400> 5598
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ggatcacgag gtcaggagat cgagaccatc ctggctaaca cggtgaaacc ccgtctctac 120
taaaaataca aaaaattagc ccgctgtggt ggcgagcgcc tgtagtccca gctacttggg 180
aggctgaggc aggagaatgg catgaacccg ggaggtggag cttgcagtga gccgagatca 240
caccaccgca ctccagcctg ggtgacagca cgagactccg tctcaaaaaa aagaaaaga 299

<210> 5599
<211> 297
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (94)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (261)
<223> n equals a,t,g, or c

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ggtggatcac gaggtcagga gatcgagacc atcntggcta gcacggtgaa accccgtctc 120
tactaaaaat acaaaaagatt agccgggcgt ggtggcgggc gcctgtagcc ccagctactc 180
gggaggctga ggcaggagaa tggcgtgaac ccgggaggcg gagcttgcag tgagccgaga 240
tcgcgccact gcactccagc ntgggcgaca gagcgagact ccgtctcaaa aaagaaa 297

<210> 5600
<211> 177
<212> DNA
<213> Homo sapiens

<400> 5600
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gcatgaaccc gggaggcgga gcttgcagtg agccgagatc gcgccactgc actccaccct 120
gggcgacaga gcgagactcc gcctcaaaaa aaaaaaaaaa aaaaaaaaaa gaaggtc 177

<210> 5601
<211> 296
<212> DNA
<213> Homo sapiens

<400> 5601
aagccaggca cagtggctca cgcctgtaat cccagcactt tgggaggctg aggcgggtgg 60
atcatgacgt caggagatca agaccatcct ggctaacatg gtgaaacccc gtctctacta 120
aaaatacaaa aaaattagcc aggtgtggtg gcgggcacct gtagtcccag ctacttggga 180
ggctgaggca ggagaatggc gtgaacccgg gaggcggagc ttgcagtgag ccgagatcgc 240
gccactgcac tctagcctgg gcaacagagc gagactccat ctcaaaaaaa aaaaaa 296

<210> 5602
<211> 318

<212> DNA
<213> Homo sapiens

<400> 5602
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gggcggatca cgaggtcagg agatcgagac catactggct aacacggcga aaccccgtct 120
ctactaaaaa taccaaaaat tagctgggcg tggtggcggg cgcctgtagt cctagctact 180
taggaggctg aggcaggaga atggagtgaa cccgggaggc ggagcttgca gtgagccaag 240
atcgcgccac tgcactccag cctgggcgac agagcgagac tccgtctcaa aaaaaaaaaa 300
aaaaaaaaaa aaagaaca 318

<210> 5603
<211> 275
<212> DNA
<213> Homo sapiens

<400> 5603
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taacacagtg aaaccctctc tctactgaaa atacaaaaaa aattatctgg gcatggtggc 120
gggcgcctgt agtcccagct actcgggagg ctgaggcagg agaatggcgt gaacccggga 180
ggcggagctt gcagtgagcc gagatcgcgc cactgcactc cagcctgggt gacagagtga 240
gactccgtct caaaaaaaaa aaaaaaagaa aaaaa 275

<210> 5604
<211> 154
<212> DNA
<213> Homo sapiens

<400> 5604
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gttgcagtga gctgagatag caccactgca ctccagcctg ggcgacagag cgagactccg 120
tctcaaaaaa aaaaaaaaaa aaaaaaaggg ccgc 154

<210> 5605
<211> 177
<212> DNA
<213> Homo sapiens

<400> 5605
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caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg agttgagatc gcgccactgc 120
actccagcct gggcgacaga gcgaaactcc gtctcaaaaa aaaaaaaaaa agacaaa 177

<210> 5606
<211> 187
<212> DNA
<213> Homo sapiens

<400> 5606
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ctgaggcagg agaatggcgt gaacccggga ggcggagctt gcagtgagcc gagatcgcgc 120
cactgcactc cagcctgggc gacagagcca gactccgtcc cccagccacc aaaaaaaaaa 180
aacaatt 187

<210> 5607
<211> 307

<212> DNA
<213> Homo sapiens

<400> 5607
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catgaggtca ggagatcgag accatcctgg ctaacacggt gaaaccccat ctctactaaa 120
aatacaaaaa attagccagg cgtggtggcg ggcgcctgta gtcccagcta ctcgggaggc 180
tgaggcagga gaatggcgtg aacctgggag gcggagcttg cagtgagccg agatcgcgcc 240
actgaactcc agcctgggcg acagagcgag actccgtctc aaaaagaaaa taaaaaagaa 300
aaatttc 307

<210> 5608
<211> 166
<212> DNA
<213> Homo sapiens

<400> 5608
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ggaggcggag cttgcagtga gccgagatcg tgccactgca ctccagcctg ggtgacagag 120
caagactccg tctcaaaaaa aaaaaacaaa aaaaacatgt aggcag 166

<210> 5609
<211> 1209
<212> DNA
<213> Homo sapiens

<400> 5609
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aattgagacc atcctggcta acacggtgaa accccatctc tactaaaaat acaaaaaatt 120
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caaaatggca aaaccccatc tctaataaaa atacaaaaaa attagccagg cgtggtggta 600
tgtgcctgta atcacagcta ctagggaggc tgaggcagga gaatcgctgg aaccaggaag 660
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aaaaaaaaa 1209

<210> 5610
<211> 142
<212> DNA
<213> Homo sapiens

<400> 5610
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agtgagccaa gatcgcgcca ctgcactcca gcctgggtga cagagcgaga ctccgtctca 120
aaaaaaaaaa aaaaaaaact ta 142

<210> 5611
<211> 306
<212> DNA
<213> Homo sapiens

<400> 5611
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ggatcacgag gtcaggagat cgagaccgtc ctggctaaca cggtgaaacc ctgtctctac 120
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gaggctgagg caggagaatg gcgtgaaccc gggaggcgga gcttgcagtg agccgagatc 240
gcgccaccgc actccagcct gggcgacaga gtgagaatcc gtctcaaaaa aaaaaaaaaa 300
aagact 306

<210> 5612
<211> 3098
<212> DNA
<213> Homo sapiens

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<210> 5613
<211> 131
<212> DNA
<213> Homo sapiens

<400> 5613
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tggctcactg caagctccgc ctcccgggtt cacaccattc tcctgcctca gcctcccaag 120
tagctgggac t 131

<210> 5614
<211> 214
<212> DNA
<213> Homo sapiens

<400> 5614
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tgctgggggt ccactccaga ccctgtttgc ctgggtatca ccagcagagg ctgcagaaca 120
gcaaagattg ctgcctgctc cttcctctgg aagcttcgtc ccagaggggc acccagcaga 180
tgccagccag agctctcctg tatgaggtgt ctgt 214

<210> 5615
<211> 1096
<212> DNA
<213> Homo sapiens

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tggcacctct acactc 1096

<210> 5616
<211> 268
<212> DNA
<213> Homo sapiens

<400> 5616
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cccttgtgag cctcagggcc gcatctgtaa aatgggcata actgtcatgc ctgtctttaa 120
gaacagcctt gggggtaaat gagtggaact catggaaaga tctcagccca caaccttcca 180
cagaacaggc gcttctcaca cagtaagtag caggagtgca gaggctgcag gcatgaatcc 240
agccagactg cctgggttca agtcccag 268

<210> 5617
<211> 293
<212> DNA
<213> Homo sapiens

<400> 5617
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cggtattaat atctgaattt aagagtccaa gagaatgtac cgcttttatt aatggtctaa 120
gatcttttat tttgttaaga aatggaagat gtgaaaagca aagacattta ttatcatgtt 180
gtcattttta ttctctttcc ctgcctagaa catagccatt aaaatataca tactatcatt 240
tatttttaaa gttgttaata tattttatat acttttttcca ataaaatgta tga 293

<210> 5618
<211> 4802
<212> DNA
<213> Homo sapiens

<400> 5618
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tcatttgcag caactatcac atcctcataa aaggggcaaa atttgtaaga tgcctcttaa 120
aataaatatt ctttttttata aaataataaa acttcaaata aatattcttt acactaaaca 180
atatgttgaa aaaattagaa aataaaggtt gaattttact gtaactgtac aatatacatg 240
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<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 787
<212> DNA
<213> Homo sapiens

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<210> 5750
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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>
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<222> (45)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (89)
<223> n equals a,t,g, or c

<400> 5843
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aaaaaaaaaa agaaaaaaaa aaaaaaaana aaaaaaaaaa agaaaaaaaa aaaaaaaaaa 120
aaaaaaagaa aaagggaaaa aaaaaaaaaa a 151

<210> 5844
<211> 118
<212> DNA
<213> Homo sapiens

<400> 5844
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ggaaggtcaa gagccaatag cacgaaaggt actgtttaat aataactgac tataaata 118

<210> 5845
<211> 195
<212> DNA
<213> Homo sapiens

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<222> (3)
<223> n equals a,t,g, or c

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<221> SITE
<222> (30)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (32)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

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tgtgaacgga taaca 195

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<211> 1276
<212> DNA
<213> Homo sapiens

<400> 5846
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<211> 487
<212> DNA
<213> Homo sapiens

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<210> 5848
<211> 8093
<212> DNA
<213> Homo sapiens

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<211> 245
<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
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<211> 420
<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 832
<212> DNA
<213> Homo sapiens

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<212> DNA
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cagc 184

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<212> DNA
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aaa 183

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tcagaaaaaa ata 193

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<212> DNA
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<212> DNA
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aataaaaaaa aaaaaaaaaa aaaaaaaaag aaaagaaaaa 280

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<211> 150
<212> DNA
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<212> DNA
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<210> 5927
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<212> DNA
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<212> DNA
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<210> 5929
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<212> DNA
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<212> DNA
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PCT/US2004/026569

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
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<212> DNA
<213> Homo sapiens

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<212> DNA
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<211> 82
<212> DNA
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<211> 182
<212> DNA
<213> Homo sapiens

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<211> 182
<212> DNA
<213> Homo sapiens

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<211> 221
<212> DNA
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<212> DNA
<213> Homo sapiens

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atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6037
<211> 606
<212> DNA
<213> Homo sapiens

<400> 6037

gttatatttt tgttaratca gctcattttt taaccaatag gccgaaatcg gcaaaatccc 60
ttataaatca aaagaataga ccgagatagg gttgagtgtt gttccagttt ggaacaagag 120
tccactatta aagaacgtgg actccaacgt caaagggcga aaarccgtct atcagggcga 180
tggcccacta cgtgaaccat caccctaatc aagttttttg gggtcgaggt gccgtaaagc 240
actaaatcgg aaccctaaag ggagcccccg atttagagct tgacggggaa agccggcgaa 300
cgtggcgaga aagkaaggga agaaagcgaa aggagcgggc gctagggcgc tggcaagtgt 360
agcggtcacg ctgcgcgtaa ccaccacacc cgccgcgctt aatgcgccgc tacagggcgc 420
gtccattcgc cattcaggct gcgcaactgt tgggaagggc gatcggtgcg ggcctcttcg 480
ctattacgcc agctggcgaa aggggatgt gctgcaaggc gattaagttg ggtaacgcca 540
gggttttccc agtcacgacg ttgtaaaacg acggccagtg aattgtaata cgactcacta 600
tagggc 606

<210> 6038
<211> 628
<212> DNA
<213> Homo sapiens

<400> 6038
aagcgtaata tttgtaaaat tcgcgttaaa ttttgtaaat cagctcattt tttaaccaat 60
aggccgaaat cggcaaaatc ccttataaat caaaagaata gaccgagata gggttgagtg 120
ttgttccagt ttggaacaag agtccactat taaagaacgt ggactccaac gtcaaagggc 180
gaaaaaccgt ctatcagggc gatggcccac tacgtgaacc atcaccctaa tcaagttttt 240
tggggtcgag gtgccgtaaa gcactaaatc ggaaccctaa agggagcccc cgatttagag 300
cttgacgggg aaagccggcg aacgtggcga gaaaggaagg gaagaaagcg aaaggagcgg 360
gcgctagggc gctggcaagt gtagcggtca cgctgcgcgt aaccaccaca cccgccgcgc 420
ttaatgcgcc gctacagggc gcgtccattc gccattcagg ctgcgcaact gttgggaagg 480
gcgatcggtg cgggcctctt cgctattacg ccagctggcg aaaggggggat gtgctgcaag 540
gcgattaagt tgggtaacgc cagggttttc ccagtcacga cgttgtaaaa cgacggccag 600
tgaattgtaa tacgactcac tatagggc 628

<210> 6039
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6039
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6040
<211> 513
<212> DNA
<213> Homo sapiens

<400> 6040
gagtgttgtt ccagtttgga acaagagtcc actattaaag aacgtggact ccaacgtcaa 60
agggcgaaaa accgtctatc agggcgatgg cccactacgt gaaccatcac cctaatcaag 120
ttttttgggg tcgaggtgcc gtaaagcact aaatcggaac cctaaaggga gcccccgatt 180
tagagcttga cggggaaagc cggcgaacgt ggcgagaaag gaagggaaga aagcgaaagg 240

agcgggcgct agggcgctgg caagtgtagc ggtcacgctg cgcgtaacca ccacacccgc 300
cgcgcttaat gcgccgctac agggcgcgtc cattcgccat tcaggctgcg caactgttgg 360
gaagggcgat cggtgcgggc ctcttcgcta ttacgccagc tggcgaaagg gggatgtgct 420
gcaaggcgat taagttgggt aacgccaggg ttttcccagt cacgacgttg taaaacgacg 480
gccagtgaat tgtaatacga ctcactatag ggc 513

<210> 6041
<211> 612
<212> DNA
<213> Homo sapiens

<400> 6041
ttcgcgttaa atttttgtta caatcagctc attgtttaac caataggccg aaatcggcaa 60
aatcccttat aaatcaaaag aatagaccga gatagggttg agtgttgttc cagtttggaa 120
caagagtcca ctattaaaga acgtggactc caacgtcaaa gggcgaaaaa ccgtctatca 180
gggcgatggc ccactacgtg aaccatcacc ctaatcaagt tttttggggt cgaggtgccg 240
taaagcacta aatcggaacc ctaaagggag cccccgattt agagcttgac ggggaaagcc 300
ggcgaacgtg gcgagaaagg aagggaagaa agcgaaagga gcgggcgcta gggcgctggc 360
aagtgtagcg gtcacgctgc gcgtaaccac cacacccgcc gcgcttaatg cgccgctaca 420
gggcgcgtcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc 480
tcttcgctat tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta 540
acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt gtaatacgac 600
tcactatagg gc 612

<210> 6042
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6042
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6043
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6043
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600

aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6044
<211> 654
<212> DNA
<213> Homo sapiens

<400> 6044
aataccgcat caggaaattg taagcgttaa tattttgtta aaattcgcgt taaatttttg 60
ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
tgaaccatca ccctaatcaa gttttttggg gtcgaggtgc cgtaaagcac taaatcggaa 300
ccctaaaggg agcccccgat ttagagcttg acggggaaag ccggcgaacg tggcgagaaa 360
ggaagggaag aaagcgaaag gagcgggcgc tagggcgctg gcaagtgtag cggtcacgct 420
gcgcgtaacc accacacccg ccgcgcttaa tgcgccgcta cagggcgcgt ccattcgcca 480
ttcaggctgc gcaactgttg ggaagggcga tcggtgcggg cctcttcgct attacgccag 540
ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg taacgccagg gttttcccag 600
tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg actcactata gggc 654

<210> 6045
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<400> 6045
cgcatcagga aatgtaagcg ttaatattnt gtaaaattcg cgttaaattt ttgttaaatc 60
agctcatttt ttaaccaata ggccgaaatc ggcaaaatcc cttataaatc aaaagaatag 120
accgagatag ggttgagtgt tgttccagtt tggaacaaga gtccactatt aaagaacgtg 180
gactccaacg tcaaagggcg aaaaaccgtc tatcagggcg atggcccact acgtgaacca 240
tcaccctaat caagtttttt ggggtcgagg tgccgtaaag cactaaatcg gaaccctaaa 300
gggagccccc gatttagagc ttgacgggga aagccggcga acgtggcgag aaaggaaggg 360
aagaaagcga aaggagcggg cgctagggcg ctggcaagtg tagcggtcac gctgcgcgta 420
accaccacac ccgccgcgct taatgcgccg ctacagggcg cgtccattcg ccattcaggc 480
tgcgcaactg ttgggaaggg cgatcggtgc gggcctcttc gctattacgc cagctggcga 540
aaggggatg tgctgcaagg cgattaagtt gggtaacgcc agggttttcc cagtcacgac 600
gttgtaaaac gacggccagt gaattgtaat acgactcact atagggc 647

<210> 6046
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6046
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tccsttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaagsaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgytacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540

atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6047
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6047
aaattgtaag cgttaatatt ttgttaagat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6048
<211> 571
<212> DNA
<213> Homo sapiens

<400> 6048
aataggccga aatcggcaaa atcccttata aatcaaaaga atagaccgag atagggttga 60
gtgttgttcc agtttggaac aagagtccac tattaaagaa cgtggactcc aacgtcaaag 120
ggcgaaaaac cgtctatcag ggcgatggcc cactacgtga accatcaccc taatcaagtt 180
ttttggggtc gaggtgccgt aaagcactaa atcggaaccc taaagggagc ccccgattta 240
gagcttgacg gggaaagccg gcgaacgtgg cgagaaagga agggaagaaa gcgaaaggag 300
cgggcgctag ggcgctggca agtgtagcgg tcacgctgcg cgtaaccacc acacccgccg 360
cgcttaatgc gccgctacag ggcgcgtcca ttcgccattc aggctgcgca actgttggga 420
agggcgatcg gtgcgggcct cttcgctatt acgccagctg gcgaaagggg gatgtgctgc 480
aaggcgatta agttgggtaa cgccagggtt ttcccagtca cgacgttgta aaacgacggc 540
cagtgaattg taatacgact cactataggg c 571

<210> 6049
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6049
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6050

<211> 639
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> n equals a,t,g, or c

<400> 6050
aattgtaagc gttaatattt tgttaaaatt cgcgttaaat ttttgttaaa tcagctcatt 60
ttttaaccaa taggccgaaa tcggcaanat ccccttataaa tcaaaagaat agaccgagat 120
agggttgagt gttgttccag tttggaacaa gagtccacta ttaaagaacg tggactccaa 180
cgtcaaaggg cgaaaaaccg tctatcaggg cgatggccca ctacgtgaac catcacccta 240
atcaagtttt ttggggtcga ggtgccgtaa agcactaaat cggaacccta aagggagccc 300
ccgatttaga gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc 360
gaaaggagcg ggcgctaggg cgctggcaag tgtagcggtc acgctgcgcg taaccaccac 420
acccgccgcg cttaatgcgc cgctacaggg cgcgtccatt cgccattcag gctgcgcaac 480
tgttgggaag ggcgatcggt gcgggcctct tcgctattac gccagctggc gaaaggggga 540
tgtgctgcaa ggcgattaag ttgggtaacg ccagggtttt cccagtcacg acgttgtaaa 600
acgacggcca gtgaattgta atacgactca ctatagggc 639

<210> 6051
<211> 648
<212> DNA
<213> Homo sapiens

<400> 6051
gcatcaggma attgtaagcg ttaatatttt gttaaaattc gcgttaaatt tttgttaaat 60
cagctcattt tttaaccaat aggccgaaat cggcaaaatc ccttataaat caaaagaata 120
gaccgagata gggttgagtg ttgttccagt ttggaacaag agtccactat taaagaacgt 180
ggactccaac gtcaaagggc gaaaaaccgt ctatcagggc gatggcccac tacgtgaacc 240
atcaccctaa tcaagttttt tggggtcgag gtgccgtaaa gcactaaatc ggaaccctaa 300
agggagcccc cgatttagag cttgacgggg aaagccggcg aacgtggcga gaaaggaagg 360
gaagaaagcg aaaggagcgg gcgctagggc gctggcaagt gtagcggtca cgctgcgcgt 420
aaccaccaca cccgccgcgc ttaatgcgcc gctacagggc gcgtccattc gccattcagg 480
ctgcgcaact gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg 540
aaaggggat gtgctgcaag gcgattaagt tgggtaacgc agggttttc ccagtcacga 600
cgttgtaaaa cgacggccag tgaattgtaa tacgactcac tatagggc 648

<210> 6052
<211> 624
<212> DNA
<213> Homo sapiens

<400> 6052
tattttgtta aaattcgcgt taaatttttg ttaaaccagc tcatttttta accaataggc 60
ggaaatcggc aaaatccctt ataaatcaaa agaatagacc gagatagggt tkagtgttgt 120
tccagtttgg aacaagagtc cactattaaa gaacgtggac tccaacgtca aagggcgaaa 180
aaccgtctat cagggcgatg gcccactacg tgaaccatca ccctaatcaa gttttttggg 240
gtcgaggtgc cgtaaagcac taaatcggaa ccctaaaggg agcccccgat ttagagcttg 300
acggggaaag ccggcgaacg tggcgagaaa ggaagggaag aaagcgaaag gagcgggcgc 360
tagggcgctg gcaagtgtag cggtcacgct gcgcgtaacc accacacccg ccgcgcttaa 420
tgcgccgcta cagggcgcgt ccattcgcca ttcaggctgc gcaactgttg ggaagggcga 480
tcggtgcggg cctcttcgct attacgccag ctggcgaaag ggggatgtgc tgcaaggcga 540
ttaagttggg taacgccagg gttttcccag tcacgacgtt gtaaaacgac ggccagtgaa 600
ttgtaatacg actcactata gggc 624

<210> 6053
<211> 509
<212> DNA
<213> Homo sapiens

<400> 6053
gttgttccag tttggaacaa gagtccacta ttaaagaacg tggactccaa cgtcaaaggg 60
cgaaaaaccg tctatcaggg cgatggccca ctacgtgaac catcacccta atcaagtttt 120
ttggggtcga ggtgccgtaa agcactaaat cggaacccta aagggagccc ccgatttaga 180
gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc gaaaggagcg 240
ggcgctaggg cgctggcaag tgtagcggtc acgctgcgcg taaccaccac acccgccgcg 300
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ggcgatcggt gcgggcctct tcgctattac gccagctggc gaaaggggga tgtgctgcaa 420
ggcgattaag ttgggtaacg ccagggtttt cccagtcacg acgttgtaaa acgacggcca 480
gtgaattgta atacgactca ctatagggc 509

<210> 6054
<211> 654
<212> DNA
<213> Homo sapiens

<400> 6054
aaatacgcat caggaaattg taagcgttaa tattttgtta aaattcgcgt taaatttttg 60
ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
tgaaccatca ccctaatcaa gttttttggg gtcgaggtgc cgtaaagcac taaatcggaa 300
ccctaaaggg agcccccgat ttagagcttg acggggaaag ccggcgaacg tggcgagaaa 360
ggaagggaag aaagcgaaag gagcgggcgc tagggcgctg gcaagtgtag cggtcacgct 420
gcgcgtaacc accacacccg ccgcgcttaa tgcgccgcta cagggcgcgt ccattcgcca 480
ttcaggctgc gcaactgttg ggaagggcga tcggtgcggg cctcttcgct attacgccag 540
ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg taacgccagg gttttcccag 600
tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg actcactata gggc 654

<210> 6055
<211> 546
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<400> 6055
ttataaatca aaagaatagn ccgagatagg gttgagtgtt gttccagttt ggaacaagag 60
tccactatta aagaacgtgg actccaacgt caaagggcga aaaaccgtct atcagggcga 120
tggcccacta cgtgaaccat caccctaatc aagtttttg gggtcgaggt gccgtaaagc 180
actaaatcgg aaccctaaag ggagcccccg atttagagct tgacggggaa agccggcgaa 240
cgtggcgaga aaggaaggga agaaagcgaa aggagcgggc gctagggcgc tggcaagtgt 300
agcggtcacg ctgcgcgtaa ccaccacacc cgccgcgctt aatgcgccgc tacagggcgc 360
gtccattcgc cattcaggct gcgcaactgt tgggaagggc gatcggtgcg ggcctcttcg 420
ctattacgcc agctggcgaa aggggatgt gctgcaaggc gattaagttg ggtaacgcca 480
gggttttccc agtcacgacg ttgtaaaacg acggccagtg aattgtaata cgactcacta 540
tagggc 546

<210> 6056
<211> 654

<212> DNA
<213> Homo sapiens

<400> 6056
aataccgcat caggaaattg taagcgttaa tattttgtta aaattcgcgt taaatttttg 60
ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
tgaaccatca ccctaatcaa gttttttggg gtcgaggtgc cgtaaagcac taaatcggaa 300
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<213> Homo sapiens

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<211> 2780
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 6110
<211> 179

<212> DNA
<213> Homo sapiens

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ttacacagcc ctcatggaat aaacagcaca aaacagcaac gacaacagca aaaaaaaaa 179

<210> 6111
<211> 179
<212> DNA
<213> Homo sapiens

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<210> 6112
<211> 365
<212> DNA
<213> Homo sapiens

<400> 6112
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taaaaccata gattttggct aaaatctata aaaccataga ttttggctaa aatctataaa 360
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<210> 6113
<211> 365
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 6116
<211> 371
<212> DNA
<213> Homo sapiens

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<210> 6117
<211> 816
<212> DNA
<213> Homo sapiens

<400> 6117
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<210> 6118
<211> 371
<212> DNA
<213> Homo sapiens

<400> 6118
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tcatattaat atttgaaatg acttaatcat tgagtaaaat tgaggcccca aacagataca 360
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<210> 6119
<211> 1325
<212> DNA
<213> Homo sapiens

<400> 6119
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<210> 6120
<211> 1325
<212> DNA
<213> Homo sapiens

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<210> 6121
<211> 1325
<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<211> 217
<212> DNA
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<212> DNA
<213> Homo sapiens

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aattgtggat ccgaggaaaa tgaaacaggg ttcaccc 397

<210> 6126
<211> 397
<212> DNA
<213> Homo sapiens

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<212> DNA
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ataaaaaaaa aaaaaaaaaa aaaattaaag ag 152

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<212> DNA
<213> Homo sapiens

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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 120
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa taaaa 165

<210> 6131
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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<220>
<221> SITE
<222> (37)
<223> n equals a,t,g, or c

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<222> (118)
<223> n equals a,t,g, or c

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<212> DNA
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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<223> n equals a,t,g, or c

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<210> 6203
<211> 2866
<212> DNA
<213> Homo sapiens

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<212> DNA
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<213> Homo sapiens

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<210> 6207
<211> 156
<212> DNA
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Application Publication

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<212> DNA
<213> Homo sapiens

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<211> 640
<212> DNA
<213> Homo sapiens

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<211> 606
<212> DNA
<213> Homo sapiens

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<211> 628
<212> DNA
<213> Homo sapiens

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gcgctagggc gctggcaagt gtagcggtca cgctgcgcgt aaccaccaca cccgccgcgc 420
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gcgatcggtg cgggcctctt cgctattacg ccagctggcg aaaggggat gtgctgcaag 540
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tgaattgtaa tacgactcac tatagggc 628

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<211> 640
<212> DNA
<213> Homo sapiens

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<211> 513
<212> DNA
<213> Homo sapiens

<400> 6324
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gccagtgaat tgtaatacga ctcactatag ggc 513

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<211> 612
<212> DNA
<213> Homo sapiens

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<211> 462
<212> DNA
<213> Homo sapiens

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<210> 6327
<211> 640
<212> DNA
<213> Homo sapiens

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<210> 6328
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6328
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<210> 6329
<211> 654
<212> DNA
<213> Homo sapiens

<400> 6329
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<210> 6330
<211> 414
<212> DNA

<213> Homo sapiens

<400> 6330
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<210> 6331
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

<400> 6331
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accgagatag ggttgagtgt tgttccagtt tggaacaaga gtccactatt aaagaacgtg 180
gactccaacg tcaaagggcg aaaaaccgtc tatcagggcg atggcccact acgtgaacca 240
tcaccctaat caagtttttt ggggtcgagg tgccgtaaag cactaaatcg gaaccctaaa 300
gggagccccc gatttagagc ttgacgggga aagccggcga acgtggcgag aaaggaaggg 360
aagaaagcga aaggagcggg cgctagggcg ctggcaagtg tagcggtcac gctgcgcgta 420
accaccacac ccgccgcgct taatgcgccg ctacagggcg cgtccattcg ccattcaggc 480
tgcgcaactg ttgggaaggg cgatcggtgc gggcctcttc gctattacgc cagctggcga 540
aaggggatg tgctgcaagg cgattaagtt gggtaacgcc agggttttcc cagtcacgac 600
gttgtaaaac gacggccagt gaattgtaat acgactcact atagggc 647

<210> 6332
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6332
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tccsttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaagsaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgytacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6333
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6333

aaattgtaag cgttaatatt ttgttaagat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6334
<211> 571
<212> DNA
<213> Homo sapiens

<400> 6334
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gtgttgttcc agtttggaac aagagtccac tattaaagaa cgtggactcc aacgtcaaag 120
ggcgaaaaac cgtctatcag ggcgatggcc cactacgtga accatcaccc taatcaagtt 180
ttttggggtc gaggtgccgt aaagcactaa atcggaaccc taaagggagc ccccgattta 240
gagcttgacg gggaaagccg gcgaacgtgg cgagaaagga agggaagaaa gcgaaaggag 300
cgggcgctag ggcgctggca agtgtagcgg tcacgctgcg cgtaaccacc acacccgccg 360
cgcttaatgc gccgctacag ggcgcgtcca ttcgccattc aggctgcgca actgttggga 420
agggcgatcg gtgcgggcct cttcgctatt acgccagctg gcgaaagggg gatgtgctgc 480
aaggcgatta agttgggtaa cgccagggtt ttcccagtca cgacgttgta aaacgacggc 540
cagtgaattg taatacgact cactataggg c 571

<210> 6335
<211> 640
<212> DNA
<213> Homo sapiens

<400> 6335
aaattgtaag cgttaatatt ttgttaaaat tcgcgttaaa tttttgttaa atcagctcat 60
tttttaacca ataggccgaa atcggcaaaa tcccttataa atcaaaagaa tagaccgaga 120
tagggttgag tgttgttcca gtttggaaca agagtccact attaaagaac gtggactcca 180
acgtcaaagg gcgaaaaacc gtctatcagg gcgatggccc actacgtgaa ccatcaccct 240
aatcaagttt tttggggtcg aggtgccgta aagcactaaa tcggaaccct aaagggagcc 300
cccgatttag agcttgacgg ggaaagccgg cgaacgtggc gagaaaggaa gggaagaaag 360
cgaaaggagc gggcgctagg gcgctggcaa gtgtagcggt cacgctgcgc gtaaccacca 420
cacccgccgc gcttaatgcg ccgctacagg gcgcgtccat tcgccattca ggctgcgcaa 480
ctgttgggaa gggcgatcgg tgcgggcctc ttcgctatta cgccagctgg cgaaaggggg 540
atgtgctgca aggcgattaa gttgggtaac gccagggttt tcccagtcac gacgttgtaa 600
aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 6336
<211> 639
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> n equals a,t,g, or c

<400> 6336

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ttttaaccaa taggccgaaa tcggcaanat cccttataaa tcaaaagaat agaccgagat 120
agggttgagt gttgttccag tttggaacaa gagtccacta ttaaagaacg tggactccaa 180
cgtcaaaggg cgaaaaaccg tctatcaggg cgatggccca ctacgtgaac catcacccta 240
atcaagtttt ttggggtcga ggtgccgtaa agcactaaat cggaacccta aagggagccc 300
ccgatttaga gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc 360
gaaaggagcg ggcgctaggg cgctggcaag tgtagcggtc acgctgcgcg taaccaccac 420
acccgccgcg cttaatgcgc cgctacaggg cgcgtccatt cgccattcag gctgcgcaac 480
tgttgggaag ggcgatcggt gcgggcctct tcgctattac gccagctggc gaaaggggga 540
tgtgctgcaa ggcgattaag ttgggtaacg ccagggtttt cccagtcacg acgttgtaaa 600
acgacggcca gtgaattgta atacgactca ctatagggc 639

<210> 6337
<211> 397
<212> DNA
<213> Homo sapiens

<400> 6337
atcaagtttt ttggggtcga ggtgccgtga agcattaaat cggaacccta aagggagccc 60
ccgatttaga gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc 120
gaaaggagcg gacgttaggg cgctggcaag tgtagcggtc cgtgcgcgta accaccacac 180
acgctgcgct taatgcgccg ctacagggcg cgtccattcg ccattcgagg tgcgcaactg 240
ttgggaaggg cgatcggtgc gggcctcttc gctattacgc cagctggcga aaggggatg 300
tgctgcaagg cgattaagtt gggtaacgcc agggttttcc cagtcacgac gttgtaaaac 360
gacggccagt gaattgtaat acgactcact atagggc 397

<210> 6338
<211> 648
<212> DNA
<213> Homo sapiens

<400> 6338
gcatcaggma attgtaagcg ttaatatttt gttaaaattc gcgttaaatt tttgttaaat 60
cagctcattt tttaaccaat aggccgaaat cggcaaaatc ccttataaat caaaagaata 120
gaccgagata gggttgagtg ttgttccagt ttggaacaag agtccactat taaagaacgt 180
ggactccaac gtcaaagggc gaaaaaccgt ctatcagggc gatggcccac tacgtgaacc 240
atcaccctaa tcaagttttt tggggtcgag gtgccgtaaa gcactaaatc ggaacccta 300
agggagcccc cgatttagag cttgacgggg aaagccggcg aacgtggcga gaaaggaagg 360
gaagaaagcg aaaggagcgg gcgctagggc gctggcaagt gtagcggtca cgctgcgcgt 420
aaccaccaca cccgccgcgc ttaatgcgcc gctacagggc gcgtccattc gccattcagg 480
ctgcgcaact gttgggaagg gcgatcggtg cgggcctctt cgctattacg ccagctggcg 540
aaaggggat gtgctgcaag gcgattaagt tgggtaacgc cagggtttc ccagtcacga 600
cgttgtaaaa cgacggccag tgaattgtaa tacgactcac tatagggc 648

<210> 6339
<211> 434
<212> DNA
<213> Homo sapiens

<400> 6339
gggcgatggc cccactaccg tgaaccatca ccctaatcaa gtttttggg gtcgaggtgc 60
cgtaaagcac taaatcggaa ccctaaaggg agcccccgat ttagagcttg acggggaaag 120
ccggcgaacg tggcgagaaa ggaagggaag aaagcgaaag gagcgggcgc tagggcgctg 180
gcaagtgtag cggtcacgct gcgcgtaacc accacacccg ccgcgcttaa tgcgccgcta 240
cagggcgcgt ccattcgcca ttcaggctgc gcaactgttg ggaagggcga tcggtgcggg 300
cctcttcgct attacgccag ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg 360
taacgccagg gttttcccag tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg 420
actcactata gggc 434

<210> 6340
<211> 624
<212> DNA
<213> Homo sapiens

<400> 6340
tattttgtta aaattcgcgt taaatttttg ttaaaccagc tcatttttta accaataggc 60
ggaaatcggc aaaatccctt ataaatcaaa agaatagacc gagatagggt tkagtgttgt 120
tccagtttgg aacaagagtc cactattaaa gaacgtggac tccaacgtca aagggcgaaa 180
aaccgtctat cagggcgatg gcccactacg tgaaccatca ccctaatcaa gtttttgggg 240
gtcgaggtgc cgtaaagcac taaatcggaa ccctaaaggg agcccccgat ttagagcttg 300
acggggaaag ccggcgaacg tggcgagaaa ggaagggaag aaagcgaaag gagcgggcgc 360
tagggcgctg gcaagtgtag cggtcacgct gcgcgtaacc accacacccg ccgcgcttaa 420
tgcgccgcta cagggcgcgt ccattcgcca ttcaggctgc gcaactgttg ggaagggcga 480
tcggtgcggg cctcttcgct attacgccag ctggcgaaag ggggatgtgc tgcaaggcga 540
ttaagttggg taacgccagg gttttcccag tcacgacgtt gtaaaacgac ggccagtgaa 600
ttgtaatacg actcactata gggc 624

<210> 6341
<211> 509
<212> DNA
<213> Homo sapiens

<400> 6341
gttgttccag tttggaacaa gagtccacta ttaaagaacg tggactccaa cgtcaaaggg 60
cgaaaaaccg tctatcaggg cgatggccca ctacgtgaac catcacccta atcaagtttt 120
ttggggtcga ggtgccgtaa agcactaaat cggaacccta aagggagccc ccgatttaga 180
gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc gaaaggagcg 240
ggcgctaggg cgctggcaag tgtagcggtc acgctgcgcg taaccaccac acccgccgcg 300
cttaatgcgc cgctacaggg cgcgtccatt cgccattcag gctgcgcaac tgttgggaag 360
ggcgatcggt gcgggcctct tcgctattac gccagctggc gaaaggggga tgtgctgcaa 420
ggcgattaag ttgggtaacg ccagggtttt cccagtcacg acgttgtaaa acgacggcca 480
gtgaattgta atacgactca ctatagggc 509

<210> 6342
<211> 654
<212> DNA
<213> Homo sapiens

<400> 6342
aaatacgcat caggaaattg taagcgttaa tattttgtta aaattcgcgt taaatttttg 60
ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
tgaaccatca ccctaatcaa gtttttgggg gtcgaggtgc cgtaaagcac taaatcggaa 300
ccctaaaggg agcccccgat ttagagcttg acggggaaag ccggcgaacg tggcgagaaa 360
ggaagggaag aaagcgaaag gagcgggcgc tagggcgctg gcaagtgtag cggtcacgct 420
gcgcgtaacc accacacccg ccgcgcttaa tgcgccgcta cagggcgcgt ccattcgcca 480
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ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg taacgccagg gttttcccag 600
tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg actcactata gggc 654

<210> 6343
<211> 546
<212> DNA
<213> Homo sapiens

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<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

<400> 6343
ttataaatca aaagaatagn ccgagatagg gttgagtgtt gttccagttt ggaacaagag 60
tccactatta aagaacgtgg actccaacgt caaagggcga aaaaccgtct atcagggcga 120
tggcccacta cgtgaaccat caccctaatc aagtttttg gggtcgaggt gccgtaaagc 180
actaaatcgg aaccctaaag ggagcccccg atttagagct tgacggggaa agccggcgaa 240
cgtggcgaga aaggaaggga agaaagcgaa aggagcgggc gctagggcgc tggcaagtgt 300
agcggtcacg ctgcgcgtaa ccaccacacc cgccgcgctt aatgcgccgc tacagggcgc 360
gtccattcgc cattcaggct gcgcaactgt tgggaagggc gatcggtgcg ggcctcttcg 420
ctattacgcc agctggcgaa aggggatgt gctgcaaggc gattaagttg ggtaacgcca 480
gggttttccc agtcacgacg ttgtaaaacg acggccagtg aattgtaata cgactcacta 540
tagggc 546

<210> 6344
<211> 654
<212> DNA
<213> Homo sapiens

<400> 6344
aataccgcat caggaaattg taagcgttaa tattttgtta aaattcgcgt taaatttttg 60
ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
tgaaccatca ccctaatcaa gttttttggg gtcgaggtgc cgtaaagcac taaatcggaa 300
ccctaaaggg agcccccgat ttagagcttg acggggaaag ccggcgaacg tggcgagaaa 360
ggaagggaag aaagcgaaag gagcgggcgc tagggcgctg gcaagtgtag cggtcacgct 420
gcgcgtaacc accacacccg ccgcgcttaa tgcgccgcta cagggcgcgt ccattcgcca 480
ttcaggctgc gcaactgttg ggaagggcga tcggtgcggg cctcttcgct attacgccag 540
ctggcgaaag ggggatgtgc tgcaaggcga ttaagttggg taacgccagg gttttcccag 600
tcacgacgtt gtaaaacgac ggccagtgaa ttgtaatacg actcactata gggc 654

<210> 6345
<211> 1564
<212> DNA
<213> Homo sapiens

<400> 6345
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cctgtcgggt acccggatga tgccctcatc aaacacattg actcccacct ggagaacagc 120
aagatctagg gcaccagccc cacccactgg ctgtttctcc gtcctctcct atcaccccca 180
aacactcact ttgaatgctg catgaatctc gtgggggggtc cctgcccttg cgacccccag 240
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cagacggggc tctgtctggg gagcacccac aggctgcctt tggggtccca gagcctgctc 600
tgtgcactga ccccagttcc tccatcctgt ggccagccta gggctcatgg catgggcccc 660
cactgggggga gggaggcatc ttgtttcttg tggttccctg caggccagtc ctgtcctcct 720
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cctggaggac tgggaagatc tagcctaaag aggcttctct gagggccagg gccctacagc 840
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ctggcactga ggcacagatc gtcaaggcag gtacccccctc aacccttctt ccactggagc 960
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gaaatctacc tcagagttgt accctcagaa ggacgggtaa gcaggaggcc agggggtccc 1200
cagggctgag gtggggagcc ttctacggcg aaagcctgcc accccacaat gaatccaccc 1260
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tctatagagc aggggagtga aggggtatgt caggcgggga aggggccaag gacacgtcat 1440
tgtaccctga gcgtccccag ggagtggaaa tggggaaggg ggcctggaga ggggaggcag 1500
gggcccctgt gctctctgaa caagttgaaa gtccaaataa aacttacctg ttccatctgt 1560
gctc 1564

<210> 6346
<211> 1670
<212> DNA
<213> Homo sapiens

<400> 6346
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ctgttatctg ccagggttta attttgagac atggccgttt cacaactgca gggtgcggga 120
agattagatg acctgaatgc tggtggtaag taaagcctca cacttcacat tattccttaa 180
ttgtctgttt ttaaaaattt gtcttaaaaa aatattaagg tggcaacata ttcaggtggc 240
aacagagggt ggggtgacca gtgacaaact gacttccatg tctctggcta atcttgattt 300
ctggagccag gctccagact aagtctggac aatcaattaa ttagcctttc tatatgtatt 360
gcctgatgaa tgatttcaat gctggacatt gaacaatggt ctgttgcaac agggtgaggc 420
cattgtctct ggcaggtggg gagatggggg ctcttgttag ctccatttga ttacaagagc 480
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cacgcctgta atcccagcac tttgggaggc tgaggcaggc agatcacaaa gtcaggagat 660
ccagaccatc ctggctaaca cggtgaaacc ccatctctac taaaaataca aaaaattagc 720
caggcgtggt ggcgggcgcc tgtagtccca gccactcggg aggctgggac aggagaatgg 780
cgtgaactcg ggaagcggag tttgcaatga gccgagttgg cgccactgca ctccaatctg 840
ggcaacagag cgagactctg tctcaaagaa acaaacaaac aaacaaacaa aaccagacaa 900
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tttagcaatg gaaatggaga acgaagatgg cctcaaagtg actacatcac cagtgttaca 1020
aaaatgggcc agaatttaag gcaagaatta tatgtttctt aatagaggga tgtttctctg 1080
tgtgtggcta cttgtattcc tgtggatttt taccagatta taagagctgc taatttctga 1140
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ataagataag tggagatttt ctcttgaaat atttccttct atgaagaaaa ggccttgaaa 1320
tgtgcatcct ctttgggttg actaatttct atgcctttac agctttaagc tgacattata 1380
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agtgcttaaa gaacaccagt gcaggaaaac tcaaactaaa tggcatcatc ccccatctct 1560
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cattctaaga aaaattaagc cagtacgttt atctcttgaa aaaaaaaaaa 1670

<210> 6347
<211> 266
<212> DNA
<213> Homo sapiens

<400> 6347
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tcgagaccag cctggccaac atggcgaaac ctcgtctcta ctaaaaacac aaaaaattag 120
ctgggtgtgg tggcaggtgc ctgtaatccc agctacttgg gaagctgagg caggagaatc 180
tcttgaacct gggaggggga ggttgcagtg agctgagatc tcaccactgc attccagcct 240
gggtgacagt gcaagactcc gtctca 266

<210> 6348
<211> 15789
<212> DNA
<213> Homo sapiens

<400> 6348
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catagcgcgt gtctcgagcc ctggcctgct ctcggcaccg ccacaacggg cgtaatatgg 120
ccgctggtgc cgggacctgc cgggcgcgcg gagggtcggg ccgaggtccg ggatccggaa 180
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gcgaggagac tctcgggctt tgaggtgaga cctgaagttc cgctggccgg tagtgtagca 300
ggaaagggca ggtcctcccg ggtcgtgagc cagtagcctc ctggggtggc aaggtgtaga 360
gaggggggcg ttgaaaggac acccgctacc cggcctgctt tctaggggtc tctttggatt 420
gaggacatca gcagcagtgg aagggatttt actggagacc tgtcactgtc agagccttaa 480
aatatcaccg acggggcctt aatgtcaccg aggtagagag aaaaggcagt agccctagag 540
actattgcga cacagtgtgc ccctcataag tttttccagg gaggggttct gtactgagtt 600
gacgccccag gagctgagca ccaggctttg catccttggg aactcagcaa acgtttgttc 660
agccaattgc aggtagcatg gcccagggct tgattgaggt ggagcgaaag ttccttccag 720
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<212> DNA

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 7422
<212> DNA
<213> Homo sapiens

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09/503,313 - 2000-02-14

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PCT/US2003/039819

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<212> DNA
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<213> Homo sapiens

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<211> 1528
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<211> 112
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<210> 6486
<211> 1449
<212> DNA
<213> Homo sapiens

<400> 6486
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<211> 970
<212> DNA

<213> Homo sapiens

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<212> DNA
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<210> 6489
<211> 139
<212> DNA
<213> Homo sapiens

<400> 6489
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<210> 6490
<211> 384
<212> DNA

<213> Homo sapiens

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<212> DNA
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<210> 6492
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<212> DNA
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<212> DNA
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<212> DNA
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<212> DNA
<213> Homo sapiens

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cactccagcc tgg 133

<210> 6539
<211> 487
<212> DNA
<213> Homo sapiens

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<210> 6540
<211> 487
<212> DNA
<213> Homo sapiens

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aaataaa 487

<210> 6541
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<212> DNA
<213> Homo sapiens

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<210> 6542
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<212> DNA
<213> Homo sapiens

<400> 6542

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<211> 1621
<212> DNA
<213> Homo sapiens

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ggactaggga agtatctgtg tgtgcattat agtccactaa aggttcaaag taatgaattt 240
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<211> 1621

<212> DNA
<213> Homo sapiens

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<211> 711
<212> DNA
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<211> 711
<212> DNA
<213> Homo sapiens

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<210> 6547
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<212> DNA
<213> Homo sapiens

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<211> 301
<212> DNA
<213> Homo sapiens

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<210> 6549
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<212> DNA
<213> Homo sapiens

<400> 6549
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<210> 6550
<211> 837
<212> DNA
<213> Homo sapiens

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<210> 6551
<211> 837
<212> DNA
<213> Homo sapiens

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<212> DNA
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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA
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<212> DNA
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<212> DNA
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Application Number: 09/782,520

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<220>

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<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> n equals a,t,g, or c

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<213> Homo sapiens

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Application Publication

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<212> DNA
<213> Homo sapiens

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<210> 7008
<211> 102
<212> DNA
<213> Homo sapiens

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<210> 7009
<211> 640
<212> DNA
<213> Homo sapiens

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<210> 7010
<211> 606
<212> DNA
<213> Homo sapiens

<400> 7010
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<211> 628
<212> DNA
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tgaattgtaa tacgactcac tatagggc 628

<210> 7012
<211> 640
<212> DNA
<213> Homo sapiens

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<210> 7013
<211> 513
<212> DNA
<213> Homo sapiens

<400> 7013
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<210> 7014
<211> 612
<212> DNA
<213> Homo sapiens

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<210> 7015
<211> 640
<212> DNA
<213> Homo sapiens

<400> 7015
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aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 7016
<211> 640
<212> DNA
<213> Homo sapiens

<400> 7016
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aacgacggcc agtgaattgt aatacgactc actatagggc 640

<210> 7017
<211> 654
<212> DNA
<213> Homo sapiens

<400> 7017
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ttaaatcagc tcatttttta accaataggc cgaaatcggc aaaatccctt ataaatcaaa 120
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<210> 7018
<211> 647
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> n equals a,t,g, or c

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gttgtaaaac gacggccagt gaattgtaat acgactcact atagggc 647

<210> 7019
<211> 640
<212> DNA
<213> Homo sapiens

<400> 7019
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<210> 7020
<211> 640
<212> DNA
<213> Homo sapiens

<400> 7020
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<210> 7021
<211> 571
<212> DNA
<213> Homo sapiens

<400> 7021
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<210> 7022
<211> 640
<212> DNA
<213> Homo sapiens

<400> 7022
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<210> 7023
<211> 639
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (88)
<223> n equals a,t,g, or c

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ccgatttaga gcttgacggg gaaagccggc gaacgtggcg agaaaggaag ggaagaaagc 360
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acccgccgcg cttaatgcgc cgctacaggg cgcgtccatt cgccattcag gctgcgcaac 480
tgttgggaag ggcgatcggt gcgggcctct tcgctattac gccagctggc gaaaggggga 540
tgtgctgcaa ggcgattaag ttgggtaacg ccagggtttt cccagtcacg acgttgtaaa 600
acgacggcca gtgaattgta atacgactca ctatagggc 639

<210> 7024
<211> 648
<212> DNA
<213> Homo sapiens

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gaccgagata gggttgagtg ttgttccagt ttggaacaag agtccactat taaagaacgt 180
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aaaggggat gtgctgcaag gcgattaagt tgggtaacgc cagggttttc ccagtcacga 600
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<210> 7025
<211> 624
<212> DNA
<213> Homo sapiens

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tccagtttgg aacaagagtc cactattaaa gaacgtggac tccaacgtca aagggcgaaa 180
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<210> 7026
<211> 509
<212> DNA
<213> Homo sapiens

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<210> 7027
<211> 654
<212> DNA
<213> Homo sapiens

<400> 7027
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agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
gaacgtggac tccaacgtca aagggcgaaa aaccgtctat cagggcgatg gcccactacg 240
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<210> 7028
<211> 546
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> n equals a,t,g, or c

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tggcccacta cgtgaaccat caccctaatc aagtttttg gggtcgaggt gccgtaaagc 180
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tagggc 546

<210> 7029
<211> 654
<212> DNA
<213> Homo sapiens

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agaatagacc gagatagggt tgagtgttgt tccagtttgg aacaagagtc cactattaaa 180
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<210> 7030
<211> 5505
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<211> 514
<212> DNA
<213> Homo sapiens

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<211> 277
<212> DNA
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<210> 7083
<211> 184
<212> DNA
<213> Homo sapiens

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<210> 7084
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<212> DNA
<213> Homo sapiens

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<210> 7085
<211> 1078
<212> DNA
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tcatagccag gattccttat ccccaaaaca gttctatttt tccttaatca ctactataga 960
gtctttacat taaattactg tcgtatgcta gataattttc tcaaattgtt aaaagaatat 1020
gtactttgga aacaaattag tatttatatt gtaaatatat tcaaaaaaaa ctaagaaa 1078

<210> 7086
<211> 521
<212> DNA
<213> Homo sapiens

<400> 7086
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atcactaagt gcatcagaaa tctgtcttcc aacacccttg gaaagaacag ggtggttttt 180
agatgtttgt gctcagacag cgggcaacag cagattaaat aacaaggcaa aaatactagg 240
aatgctggta gaaatctatg accgcaggtt aaaaaaaaag accactcaag taggccagac 300
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tacttttgga cccaggcatt agaccgctta agagaatcta tcagtccagg tgatgagtgt 420
gtggctgcag gccagcaggc tgtggaatgg caagcagata ccttttatat atttctttta 480
aaatatcagt taaaaaaagg ctatttatat tccataaaac t 521

<210> 7087
<211> 521
<212> DNA
<213> Homo sapiens

<400> 7087
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tacttttgga cccaggcatt agaccgctta agagaatcta tcagtccagg tgatgagtgt 420
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<210> 7088
<211> 844
<212> DNA
<213> Homo sapiens

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acagtgatgt ctggttctga cttatttatg tatttttttt ctatttgttt ctggcaatgc 180
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<210> 7089
<211> 105
<212> DNA
<213> Homo sapiens

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<210> 7090
<211> 281
<212> DNA
<213> Homo sapiens

<400> 7090
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tccagttacc agaatctgaa tcattgtcta atgtgccacg tatataacaa tatatcacta 180
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<210> 7091
<211> 664
<212> DNA
<213> Homo sapiens

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caagccttcc ctggtgtgtg cagtaggtaa tgaatgcttg cctgctcagc acccactaca 180
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cctgctcatc cccattcctg atgctgaggg atctgagaaa atcacttgta aaattcgggg 480
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gagatcttgc cattgcactc cagcctgggt gacagagtgt gactccgtct caaaaaaaaa 660
gaaa 664

<210> 7092
<211> 672
<212> DNA
<213> Homo sapiens

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tcacgttttg gcatggagca ggcactcttt tctttgcccc caggtgggac taagccacca 120
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<210> 7093
<211> 666
<212> DNA
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aaaaaa 666

<210> 7094
<211> 632
<212> DNA
<213> Homo sapiens

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ggtgacagag tgagactcca tctcaaaaaa aa 632

<210> 7095
<211> 669
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (110)
<223> n equals a,t,g, or c

<400> 7095
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caagccttcc ttggtgtgtg cagtgggtga tgaatgcttg cctgctcagc acccactaca 180
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<210> 7096
<211> 674
<212> DNA
<213> Homo sapiens

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caagccttcc ctggtgtgtg cagtgggtga tgaatgcttg cctgctcagc acccacttcc 180
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aaaaaaaaaa aaaa 674

<210> 7097
<211> 726
<212> DNA
<213> Homo sapiens

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<210> 7098
<211> 336
<212> DNA
<213> Homo sapiens

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